

Chapter One

Introduction

1.1 Background of the study

The primary goal of any nation including Nepal is rapid economic growth. Though, the process of economic development depends on various factors, however, economists are now convinced that capital formation and its proper utilization play a vital role. In this regard, well financial institutions have a great bear.

Banks are important financial institutions for any economy. It collect scattered financial resources from the masses and invests them among those engaged in economic and commercial activities. The importance of the banks to a national economy is understood by the fact that banks have access to government safety net (Shrestha, 2008). There are different types of banks, such as; Development bank, Central bank Commercial bank, Exchange bank, saving bank etc.

Commercial banks are those financial institutions which provide finance for trade and industry and even agriculture sector. Moreover, commercial banks also provide technical and administrative assistance to industries, traders and business enterprise (Adhikari, 2008). Under the commercial bank act 1974, the commercial banks are those banks which provide short term and long term debts whenever necessary for trade and commerce. They perform different activities like: Accepting deposits from the public and grant loan, purchase and discount the bill, promissory notes and exchange foreign currency. Commercial banks collect the scattered meager saving and place them into productive channels. They are media through which monetary policy is affected.

Capital structure concept has significant place in theory of financial management. Capital structure refers to the proportion of debt and equity capital. The

financing decision of a firm relates to choice of proportion of debt and equity to finance the investment requirement (Ezra Solomon). The capital structure has two-fold effect. First, it is concerned with cost of capital and on the other; it is related with the value of the firm. A proper balance between debt and equity is necessary to ensure a tradeoff between risk and return to the shareholders. With an optimum debt and equity mix the cost of capital can be minimum and the market price per share can be maximum (Khan & Jain, 1989:536). Capital Structure decision influences the shareholder's return and risk. Consequently, the M.V. of the share may be affected by the capital structure. In this regard, Subedi (2004) stated that a financing mix, which lead to maximization of shareholders wealth as reflected in the market price of shares is termed as an optimum capital structure.

1.2 General Background of Banks in Nepal

The history of the systematic development of commercial banks in Nepal as compared to other developed countries is of recent origin. In Nepal, efforts are being made to accelerate the pace of economic development after the adaptation of first five year plan in 1956, Nepal Bank Ltd. The first and oldest bank in modern banking history of Nepal, was established in 1937A.D. (30 Kartik 1994 B.S.), with 51% government equity. Nepal Bank Ltd also used to function as central bank of the country up to 2012 B.S. on 2013 B.S.; Nepal Rastra Bank was established as central Bank of Nepal under the Nepal Rastra Bank Act 2012. Government initiated some corrective measure to stabilize the economy with the assistance of IMF standby arrangement in mid 1980s. In FY 1985, in subsequently embarked upon the structured adjustment program encompassing measures to increase domestic resource mobilization, strengthen financial sectors, and liberalize industrial and trade policies (World Bank, 1992:381). Since then several financial institutions and commercial banks have been established in the process of development and liberalization policy for the economic development of the nation.

In the early 1980s, government permitted the establishment of foreign joint venture banks in Nepal. As a result, three joint venture banks Nabil, NGLB, and NIBL came into existence by the end of the first half of the 1980s. Henceforth, a number of joint venture commercial banks came into existence. The basic objective to allow foreign joint venture banks to operate in Nepal was mainly to develop the banking sector, to create healthy competition for the further development of already existing old banks, and to introduce new technological efficiency in the banking sectors. At present, there are Twenty Five commercial banks, nine development banks, forty-five co-operative banks, twenty-five non-governmental organizations and a central bank.

List of Commercial Bank

S.N.	Commercial Banks	Operation Date (A.D)	Head Office
1	Nepal Bank Limited(NBL)	1937/11/15	Kathmandu
2	Rastriya Banijya Bank(RBB)	1966/01/23	Kathmandu
3	NABIL Bank Ltd.(NABIL)	1984/07/16	Kathmandu
4	Nepal Investment Bank Ltd.(NIBL)	1986/02/27	Kathmandu
5	Standard Chartered Bank Nepal Ltd.(SCBL)	1987/01/30	Kathmandu
6	Himalayan Bank Ltd.(HBL)	1993/01/30	Kathmandu
7	Nepal SBI Bank Ltd.(NSBI)	1993/07/07	Kathmandu
8	Nepal Bangaldesh Bank Ltd.	1993/06/05	Kathmandu
9	Everest Bank Ltd.(EBL)	1964/10/18	Kathmandu
10	Bank of Kathmandu Ltd.(BOK)	1995/03/12	Kathmandu
11	Nepal Industrial & comm. Bank(NIC)	1996/10/14	Sidharthanagar
12	Lumbini Bank Ltd.(LBL)	1998/07/17	Narangadh
13	Nepal Industrial and Commercial Bank Ltd.(NIC)	1998/07/21	Biratnagar

14	Machhapuchhre Bank Ltd.(MBL)	2000/10/03	Pokhara
15	Kumari Bank Ltd.(KBL)	2001/04/03	Kathmandu
16	Laxmi Bank Ltd.(LXBL)	2002/04/03	Birgunj
17	Siddhartha Bank Ltd.(SBL)	2002/12/24	Kathmandu
18	Agriculture Development Bank Ltd.	2006/03/16	Kathmandu
19	Global Bank Ltd.	2007/01/02	Birgunj
20	Citizens Bank Ltd.	2007/06/21	Kathmandu
21	Prime Commercial Bank Ltd.	2007/09/24	Kathmandu
22	Bank of Asia Nepal Ltd.(BOA)	2007/10/12	Kathmandu
23	Sunrise Bank Ltd.	2007/10/12	Kathmandu
24	Development Credit Bank Ltd.(DCBL)	2008/05/25	Kathmandu
25	NMB Bank Ltd.(NMB)	2008/06/02	Kathmandu

1.3 A Brief Introduction of selected commercial banks

A. Nabil Bank Limited

Nabil Bank Limited, the foreign venture bank of Nepal, started its operation in 12 July 1984. Nabil was incorporated with the objective of extending international standard modern banking services to various sectors of the society. Dubai bank ltd. Was the first joint venture foreign partner of Nabil bank, currently NB (international) ltd., Ireland is the foreign partner of Nabil bank. Nabil Bank limited had the official name Nepal Arab Bank Limited till 31 December 2001. Nabil provides a full range of commercial banking services through its 19 points of representation across the kingdom and over 170 reputed correspondent banks across the globe. Nabil, as a

pioneer in introducing many innovative products and marketing concepts in the domestic banking sector, represents a milestone in the banking history of Nepal as it started an era of modern banking with customer satisfaction measured as a focal objective while doing business.

Share Capital of Nabil as at 2008:

Authorized Capital	Rs. 1600,000,000
Issued Capital	Rs. 689,216,000
Paid-up Capital	Rs. 689,216,000

B. Investment Bank Limited.

Nepal Investment Bank Limited, previously, Nepal Indosuez Bank limited was established in 16 Chaitra 2042. Nepal Investment bank is forth commercial bank of Nepal. Nepal Investment bank ltd. is a joint venture between Nepal and France. The French partner (holding 50% of the capital of the NIBL) was credit Agrocole Indosuez, a subsidiary of one of the largest banking group in the world. It became Nepal Investment bank on Jestha 2059 B.S., after its French partner sold its share to 4 Nepali institutions.

Share Capital of Investment as at 2008:

Authorized Capital	Rs. 1,000,000,000
Issued Capital	Rs. 801,352,600
Paid-up Capital	Rs. 801, 352, 60

C. Bank of Kathmandu

Bank of Kathmandu has established in collaboration with SIAM Commercial public co. ltd. (SCB) in March 1995. Bank of Kathmandu started its operation with an objective of stimulate the Nepalese economy and take it to newer heights. It was

named Bank of Kathmandu in September 14, 1998, after management Termination agreement between Bank of Kathmandu and SIAM commercial Bank. Paid up capital of Bank of Kathmandu is Rs. 46 crore as at 2007. Bank of Kathmandu is granted with ‘The banker technology award 2004’.

Share Capital of Investment as at 2008:

Authorized Capital	Rs. 1,000,000,000
Issued Capital	Rs. 606, 173, 600
Paid-up Capital	Rs. 603, 141, 300

1.4 Problem of the study

In Nepal, after the economic liberalization many commercial banks have emerged. Currently establishment of bank in various number have drastically made changes over financial scenario of Nepal. Though, the flow of money in the market is highly still, they are not fully utilized in absence of better investible project. Capital structure theory affects the financial decision of any enterprise. Capital structure concept itself has been the subject of controversy since, the publication of Modigliani & miller’s classic paper in 1958(Ghimire: 1999). Many empirical studies exist supporting and refusing the MM and traditional view.

In Nepal, many studies are conduct most of them are done using financial ratio. Dr. M.K. Shrestha (1985:54) found on his study that some public enterprises studied have very confusing capital structure. Another study conducted by R.D. Shrestha (1985) concluded that most of the companies have debt capital relatively very higher than equity capital. Adhikari (1991) and Khatri (1998) also conducted study to test relationship between cost of capital and capital structure result was supporting traditional view. Bhattarai (2006) have also conducted research and found that some companies do not plan capital structure. Same research conducted by Shrestha (2008), results that all JVB’s under studied has used high percentage of total debt in raising the assets.

It has still that subject of curiosity for everyone to know what the actual position of banks regarding capital structure .Focus of present study will be on capital structure of Bank of the year 2008 NIBL as compared to its competent banks NABIL and BOK. Therefore this study will seek to explore the answer to the following research questions:

- a. How far NIBL, NABIL and BOK have been able to mobilize their resources?
- b. How efficiently these banks are managing their capital structure?
- c. To what extent these banks have been able to raise their profitability?
- d. How does leverage affects the cost of capital in Nepalese situation?

1.5 Objective of the study

As stated above commercial banks have played a vital role to uplift the economic development of the country. For that, it must have strong financial position i.e. capital structure and the way it finance. The basic objective of this study is to analyze, examine and interpret the capital structure of the year 2008 NIBL as compared to its competitor NABIL and BOK. To achieve the main objective, following objective have been set out for study:

- a. To analyze the relationship of the capital structure and cost of capital of selected commercial banks.
- b. To analyze the comparative capital structure of selected commercial banks in term of the financial and statistical tools.
- c. To analyze the profitability position of the banks.
- d. To provide suggestion and recommendation on the basis of analysis to improve the financial weakness of commercial banks.

1.6 Limitation of the study

A problem of data is very acute in Nepal. Even the financial statements of Nepalese enterprises published by them are not readily available since they are treated as confidential. Periodic data like: monthly, quarterly could not be obtained. Since, the study is focusing to fulfill the partial requirement course of M.B.S. of T.U. It will have some limitation. We have limited resources and it may be difficult to explore researcher to find out new aspect. Reliability of statistical tools used and lack of research experience are the major limitation and some other limitations can be enlisted as follows:

- a. The study is limited to the related variables affecting capital structure of selected banks.
- b. The secondary data are used to analyze for result interpretations, so the accuracy of the finding depends on the reliability of available information.
- c. The period of the study is five operating years from FY2059/60 to 2064/65.
- d. It has time and resources constraint.
- e. This research has conducted to fulfill the requirement of MBS course for prescribed time.

1.7 Organization of the study

This study has been organized into five chapters, each devoted to some aspects of loan management of joint venture commercial bank. The title of each of these chapters is summarized and the contents of each of these chapters of this study are briefly mentioned here:

Chapter-I: Introduction

Chapter-II: Review of Literature

Chapter-III: Research Methodology

Chapter-IV: Data Presentation and Analysis

Chapter-V: Summary, Conclusion and Recommendations.

This first chapter deals with the subject matter consisting introduction, a brief profile of the banks, focus of the study, statement of the problem, objective of the study, significance of study, limitations of the study and chapter scheme of the study.

The second chapter is mainly focused with literature review that includes a discussion on the conceptual framework on loan management and review of major studies relating with Capital Structure decision.

The third chapter describes the research methodology used to conduct the present research. It deals with research design, sources of data, data processing procedures, population and sample, period of the study, method of analysis and financial and statistical tools.

The fourth chapter is concerned with analytical framework. It includes the analysis of financial indicators, analysis of financial indicators, analysis of mean, correlation coefficient, regression analysis, and financial analysis.

The fifth chapter includes the major findings and conclusion of the study which deals about the main theme of study and comparison of Capital structure of the banks with recommended for improvement of Capital Structure management of the selected banks.

The bibliography and annexes are also incorporated at the end of the study.

Chapter Two

Review of literature

This chapter is focused on brief discussion about the abstract regarding the theories of capital structure. In order to accomplish the objective of the study, the chapter includes review of relevant concepts, assumptions, books and journals. As well as major findings of previous studies of the relevant field is included in precise manner.

2.1 Concept of Commercial Bank

Commercial banks are those financial institutions, which deals in accepting deposits from persons, institutions and giving loans against securities. They provide working capital needs for trade, industry and even to agriculture sectors. Moreover, commercial banks also provide technical and administrative assistance to industries, trade and business enterprises.

Under the commercial bank Act 1974, the commercial banks are those banks which provide short term and long term debts, whenever necessary for trade and commerce. They accept deposits from the public and grant loans in different from like purchase and discount the bill for exchange, promissory notes, and exchange foreign currency.

A commercial bank is one which exchange money, deposit money, accepts deposit, grant loan and performs commercial banking function. And which is meant for a co-operative, agriculture, industry or for such specific purpose.

An American institute of banking has laid down the four major functions of the commercial bank such as: receiving and handling payments for its clients, making loan and investments and creating money by extension of credit.

Meanwhile, under the free enterprises system like USA, the interest of the nation as well as that of the individual stockholders is supposed to be best served. But profit cannot be a sole objective of an enterprise and it should not be evaluated just on the basis of the profit earned. Neither the bank nor the community will be best served if the banker unreasonably sacrifices the safety of his fund or liquidity of his bank in an effort to increase income.

2.2 Capital Structure concept

Finance is one of the most important resources of an organization. It is often compared with lifeblood of business. There are two sources of finance for business organization. They are equity and debt. Equity provides the ownership of the firm to the shareholders and the debt, borrowed fund, has a fixed charge, irrespective to the earning to the firm and the firm has to pay the fixed charges periodically to the provider of debt fund. Sometime retained earning may also be used as sources of finance in running business. The term ‘capital structure’ means the proportion of different types of securities issued by a firm.

The capital structure concept has significant place in theory of financial management. Capital structure of a firm refers to the composition of capital stock, surplus and long term debt. So, the “capital structure” refers to represent the proportionate relationship between the different forms of financing. Sometime ‘capital structure’ is taken as ‘Financial structure’. However, a distinction can draw between ‘financial structure’ and ‘capital structure’ (Weston and Bringham, 1972:249-50). The term financial structure is used to refer to the manner in which the assets of the firm are financed. Thus, it represents the entire capital and liability side of the balance

sheet. On the other hand, the term capital structure is used in a restrictive sense. It refers to the composition of long term sources of finance. Such as, preference capital, debenture, long term debt and equity capital including reserve and surpluses (i.e. retained earnings) and excludes short term debt. Thus used in this sense, capital structure is a part of financial structure. From a practical point of view, the distinction is not very rigid. In practice, short term debts, in many cases, are used as substitutes of long term debts for financing the long term debts also provide leverage benefits to the share holder and risk like the long-term debts. Hence, the terms financial structure and capital structure may be used interchangeably (Pandey, 1981).

‘Capital structure’ should not be confused with the word ‘capitalization’. Capitalization is a quantitative aspect of financial Planning as it refers to the total amount of securities issued by a company, while capital structure is concerned with qualitative aspect as it refers to the kinds of securities and the proportionate amount that make up capitalization (Upadhaya: 799).

The capital structure has two-fold effect. First, it is concerned with cost of capital and on the other; it is related with the value of the firm. A proper balance between debt and equity is necessary to ensure a tradeoff between risk and return to the shareholders. A capital structure is said to be optimum, when the marginal real cost (Explicit as well as implicit) of each available source of financing identical. With an optimum debt and equity mix, the cost of capital is minimized and the market price per share (or total value of the firm) is maximized (Khan and Jain, 1989: 536)

Choosing optimal Capital structure is a major decision of the firm. Alternative having minimum cost with reasonable return compared to other is acceptable. As the concept of “cost of capital” is lying at the heart of the body of financial theory is useful while selecting appropriate capital structure for the firm (Gitman and Mercurio 1981: 21). The cost of capital refers the discount rate that would be used in determining value of the estimated future cash proceeds and eventually deciding whether the project worth under taking or not (Barges, 1953: 2). So it represents a

critical link between management's financial decision and value of the firm (Keoun, 1996: 426).

The overall cost of capital function of criterion for the budget, determination of the magnitude of the budget, financial decision and ex-post evolution of the enterprises (Baral, 1996: 6). So it is clear that the concept of cost of capital is helpful in the selection of optimal capital structure, which maximizes the value of the firm are intricate and inter woven concept of finance theory. Capital structure affects the cost of capital and ultimately the value of the firm. Management can achieve its goal of maximization of owner's wealth by making the judicious mixture of different concept of cost of capital and capital structure which has multifold effect.

2.3 Capital structure Theories

Capital structure theories developed so far are clung to the question of existence of the optimal capital structure. Most of the theoretical and empirical debates so far are resolved around the maximization of the value of firms through the judicious composition of its debt and equity fund. NI and traditional theories of capital structure claims that there is the existence of the optimal capital structure. They content that proper mix of debt and equity can maximize the value of the firms. Whereas, NOI approach and MM hypothesis contend that capital structure is irrelevant to the value of firm as the benefit of debt capital is just offset by the increase in the cost of equity. Likewise, MM hypothesis states that there is no level of optimal capital structure. They support the NOI approach by providing logically consistent behavioral justifications in its favor.

Assumption and definitions:

The following assumptions are made to grasp the elements of the capital structure and the value of the firm of the cost of capital controversy properly. (Van Horne: 1985)

-) Firms use only two sources of capital i.e. debt and equity.
-) The corporate and personal income taxes do not exist. This assumption is relaxed later on.
-) The total assets of the firm are given. The degree of leverage can be changed by selling debt to repurchase shares or selling shares to retire debt.
-) Investors have the same subjective probability distributions of future expected EBIT for a given firm.
-) The firm has a policy of paying 100% dividends.
-) The operating earnings are not expected to grow.
-) The business risk is assumed to be constant and independent of capital structure and financial risk.

In the analysis of capital structure, following notations are used:

S= Market value of ordinary shares.

D= Market value of debt.

V= Total value of the firm.

K_d= Cost of debt.

K_e = Cost of equity.

K_o= Overall cost of capital.

EBIT= Earnings before Interest and taxes or NOI

2.3.1 Traditional Theory

2.3.1.1 Optimum capital structure theory or structure

This approach is also known as an intermediate approach. This approach contends that overall cost of capital of the firm can be minimized judicious mix of debt and equity capital. This view clearly implicates that the cost of capital decreases within the reasonable limit of debt and the increases with leverage. Thus, an optimum capital structure exists and it occurred when the cost of capital is less or the value of the firm is more. This theory carries the clear implication that the cost of debt plus the increased cost of equity, together on a weighted basis, will be less than the cost of equity which, existed on equity before debt financing. This theory can be divided into three stages:

First stage: Increasing value

The first stage begins with the initiation of debt in the total capital. At the beginning, the cost of equity, K_e , remains constant or rises slightly with debt and it does not increase fast enough to offset the advantage of low cost debt. Here, the cost of debt, K_d , remains constant or rises negligibly. Thus, the value of the firm 'V' increases, and the overall cost of capital, declines with increasing leverage.

Under the assumption that K_e remains constant within the acceptable limit of debt, the value of the firm will be:

$$V = S + D$$

Thus, as long as K_e and K_d are constant the V increases at a constant rate. $(K_e - K_d) / K_e$, as the amount of debt increases.

$$K_o = X/V * K_e - (K_e - K_d) D/V$$

This implies that, with $K_e > K_d$, the average cost of capital will decline with leverage.

Second stage: Optimum Value

Once the firm has reached a certain degree of leverage, further application of debt will increase the cost of equity due to added financial risk that offsets the advantages of low cost debt. Thus, the total market value of the firm remains constant. Within that range or at the specific points, the value of the firm will be maximized or the cost of capital will be minimized.

Third stage: Declining Value

Beyond the acceptable limit of leverage, the value of the firm decreases with leverage or the cost of the capital increases with leverage. This occurs because investors perceive a high degree of financial risk and demand a higher equity capitalization rate, which offsets the advantage of low cost debt.

The overall effect of above three stages is to imply that the cost of capital is a function of leverage. At first it declines with leverage and after entering a minimum level it starts rising. The relation between cost of capital and leverage is graphically shown in following figure. Wherein the overall cost of capital curve, K_o is saucer shaped with a horizontal range. It indicates that there is a range of capital structure in which the cost of capital is minimized. K_e is assumed to increase slowly at first and then at a faster rate.

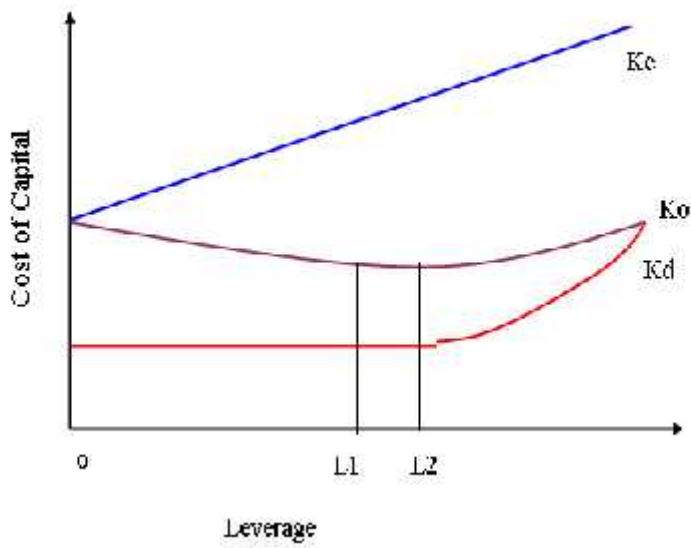


Figure 2.1 The cost of capital behavior

In the following figure, the cost of capital curve is shown to be U-shaped. Under such a situation there is a precise point at which the cost of capital would be minimized. The precise point defines the optimum capital structure.

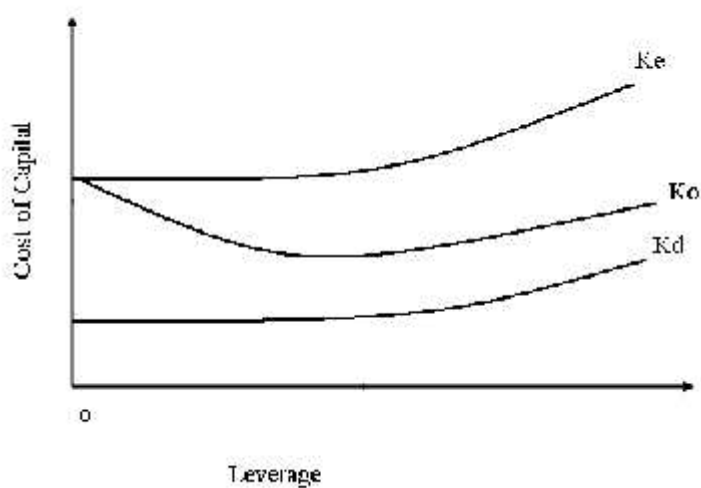


Figure 2.2: The cost of Capital behavior

2.3.1.2 Net Income Theory or Approach

The NI approach is also known as relevant theory of capital structure, as the capital structure decision is relevant to the valuation of the firm. This approach contends that the value of a firm can be maximizing or minimizing the proportion of debt in the capital structure can minimize the overall cost of capital. The crucial assumptions of this approach are:

The use of debt does not change the risk perception of investors, as a result, the equity-capitalization rate (K_e), and the debt-capitalization rate ($K_d < K_e$).

1. The corporate income taxes do not exist
2. The overall cost of capital is measured as:

$$K_o = \text{NOI} / V$$

Or, $K_o = \text{EBIT} / V$

3. The overall cost of capital (K_o) can also be measured as;

$$K_o = K_e - (K_e - K_d) D/V$$

The assumption of the NI approach shows that K_e and K_d are constant and K_d is less than K_e . Therefore, K_o will decrease as D/V increases.

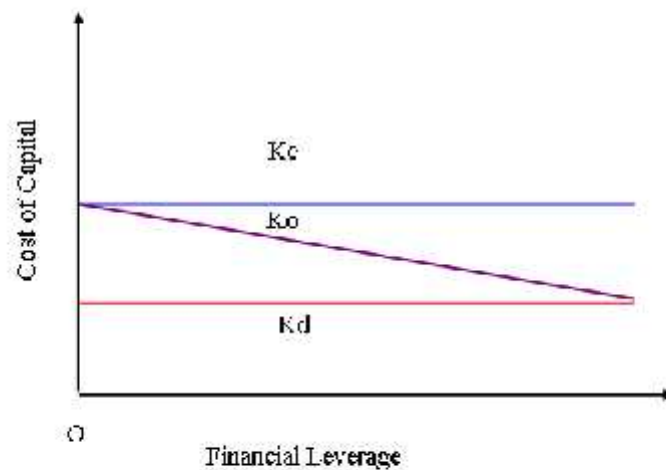


Figure 2.3: The effect of leverage on the cost of capital under NI Approach

Under NI approach, K_e and K_d are assumed not to change with leverage. When the proportion of debt is increased in the capital structure, it causes overall cost of capital to decrease. Thus, the firm will have the maximum value and the lowest cost of capital, when it is all most debt financed, under NI approach.

2.3.2 Modern Theory

2.3.2.1 Net Operating Income Approach

The NOI approach contends that capital structure is irrelevant to the cost of capital and value of the firm. Thus, it is called irrelevancy theory of capital structure. As per this approach the market value of the firm is not affected by the changes in capital structure. The market value of the firm is found out by capitalizing the net operating income at the overall cost of capital, K_o , which is a constant.

The market value of the firm is determined as:

$$V = D + S$$

$$V = \text{EBIT} / K_o$$

Where, K_o , the overall capitalization rate depends on the business risk of the firm. It is independent of financial mix. If NOI and K_o are independent of financial mix, V will be a constant and independent of capital structure changes.

The critical assumptions of NOI approach are:

-) The market capitalizes the value of the firm as a whole. Thus, the split between debt and equity is not important.
-) The market uses an overall capitalization rate (K_o) to capitalize the net operating income. K_o depends on the business risk.
-) If the business risk is assumed to remain unchanged, K_o is a constant.
-) The use of less costly debt funds increases the risk of shareholders. This causes the equity-capitalization rate to increase. Thus, the advantage of debt is offset exactly by the increase in the equity capitalization rate (K_e).
-) The cost of debt (K_d) also remains constant.
-) The corporate income taxes do not exist.

-) The market value of equity can be determined as:
$$S = V - D$$
-) The cost of equity can be defined as follows:
$$K_e = K_o + (K_o - K_d) D/S$$
-) The equation indicates that, K_e increase with leverage continuously, if K_o and K_d are constant.

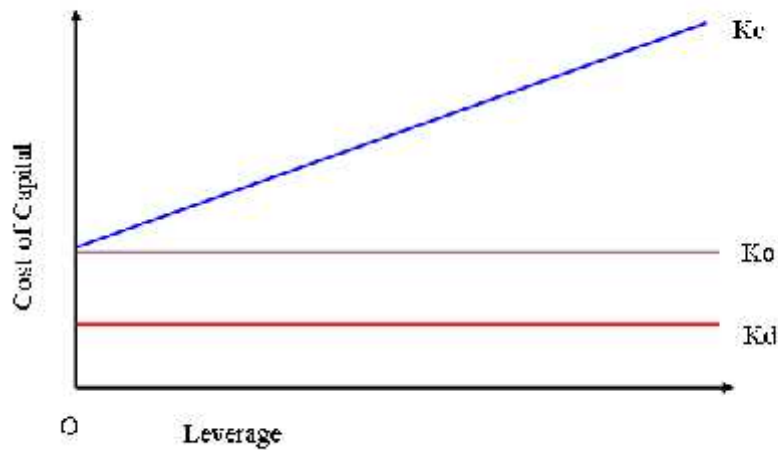


Figure 2.4: The effect of Leverage on the cost of capital

As the average cost of capital, K_o is constant, this approach implies that there is not any unique optimum capital structure. It means, every capital structure is optimum, as the cost of capital is the same at all capital structures.

2.3.2.2 The Modigliani- Miller Approach

This theory was developed by Modigliani and Miller in their 1958 article. MM theory asserts that capital structure decision is irrelevant and there is no level of optimal capital structure. Further, it states that cost of capital is the expected net operating income divided by the total market value of the firm and it is equal to the capitalization rate of a pure equity stream of its risk class. (Pandey, 1999)

Assumptions:

The MM hypothesis can be best explained in term of their propositions I and II. Their propositions based on certain assumption, particularly related to the behavior of investors and capital market, the actions of the firm and tax environment, can be described as:

-) Securities are traded in the perfect capital market situation. This specifically means that:
 -) Information is cost less and readily available to all investor.
 -) No transaction cost or govt. restriction in the capital market transaction.
 -) The investors can borrow, at the same term and condition as firm can.
 -) All securities are infinitely dividable.
 -) Investors are rational and behave accordingly.
 -) Firms can be grouped into homogeneous risk classes. It is generally implied that firms within same industry constitute a homogeneous class.
 -) The risk of investors is defined in terms of the variability of the net operating income.
 -) No corporate income taxes exist.
 -) Firms' distribute all net earnings to the shareholders, i.e. 100% Payout.

Proposition I

With given assumptions, MM argue that for firms in the same risk class, the total market value is independent of the debt-equity mix and is given by capitalizing the net operating income by the rate appropriate to that risk class.

Proposition I can be defined as:

$$V = S + D = X / K_o = \text{NOI} / K_o$$

Where,

V= The Market Value of the firm

S= The Market Value of the firm's ordinary equity

D= The Market Value of debt

X= the expected net operating income on the assets of the firm.

K_o = The capitalization rate appropriate to the risk class of the firm.

The case can be stated in terms of the firm's average cost of capital, which is the ratio of the market value of all its securities. That is:

$$X/S - D = X/V = K_o$$

If K_d and K_e are defined as the expected return on the firm's debt and equity respectively, then expected net operating income is:

$$X = K_o V = K_e S + K_d D$$

By definition,

$$K_o = X/V$$

$$K_o = K_e S/V + K_d D/V$$

Since, MM conclude that the total market value of the firm is unaffected by the debt-equity mix, it follows that the cost of capital is completely independent of its capital structure and is equal to the capitalization rate. The cost of capital function, as hypothesized by MM is presented in figure.

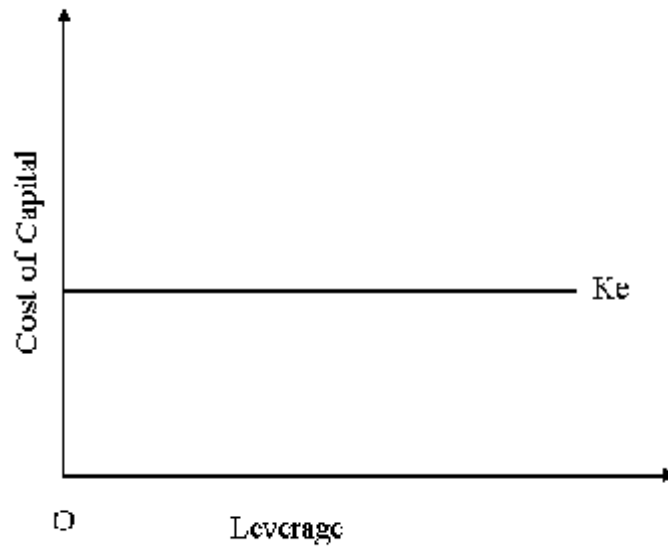


Figure 2.5: The Cost of Capital under M-M Proposition

Thus, two firms identical in all respects except to the capital structure have the same value and cost of capital. In this case, arbitrage will take place to enable investors to engage in personal leverage as against the corporate leverage to restore equilibrium in the market.

Proposition II

According to this proposition, firm can be run without debt. It states that as the firm's use of debt increase, cost of equity also rises. The MM proposition could be valid, if K_d remains constant for any degree of leverage. But in practice K_d increase with leverage beyond a certain reasonable level of debt. However, MM maintains that even if K_d is increasing, K_o will remain constant. They argue when K_d will increase at a decreasing rate and may even turn down eventually. This is shown in figure

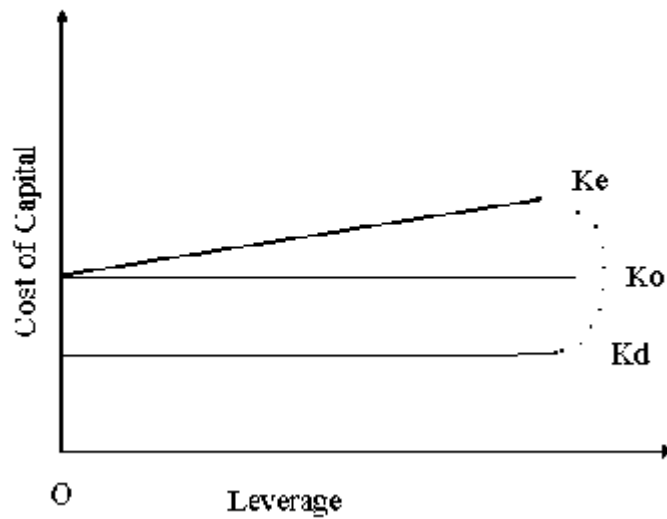


Figure 2.6: Cost of equity under the M-M Proposition II

Proposition III

According to MM hypothesis, they stated in various proposition that the total risk is not alter by changes in capital structure. Hence, the total value of the firms remains same regardless of financial leverage. In their vision the value of two firms has to remain same, otherwise the investors make profit by selling share of overvalued firm. In case of overvaluation, supply of share increases as there are more to sell shares to that extend that the price will come down. Similarly, price under valuation brings more demand for the share as there are more buyers to buy and that tends to increase value. Thus, overvaluation and undervaluation of share tends to bring the same value in marked through arbitrage process.

Arbitrage process refers to smoothness and continuous buy and selling process by the investor into identical firms at different prices because of difference in capital structure. So, the arbitrage process under MM hypothesis or proposition tends to give explanation that value is not affect by change in capital structure. But they made it specific that investors substitute personnel leverage for corporate leverage in arbitrage process.

Steps of Arbitrage process

Step 1: Sell the stock of levered firm.

Step 2: Borrow an amount equal to previous proportional participation in levered firm.

Step 3: Buy the stock in unlevered firm to generate profit or extra money.

2.4 Financial Leverage

Financial leverage involves the use of funds obtained at fixed costs in the hope of increasing the return to stockholders. Weston and Brigham defined financial leverage as the ratio of total debt to total assets or total value of the firm. The use of the fixed charges sources of funds, such as debt and preference capital along with the owner's equity in the capital structure, is described as financial leverage or 'trading on equity'. Trading on equity is derived from the fact that it is the owner's equity that is used as a basis to raise debt equity that is traded upon. The supplier of debt has limited participation in the company's profits, therefore, debt holder will insist on protection in earnings and values represented by ownership capital.

2.5 Review of Previous Research

Many studies have been conducted upon the capital structure of Nepalese Corporation. In order to assist this research work, some of relevant studies have been stated below.

Barge (1963) tested MM hypothesis with the data of 61-class railroad, 63 department store companies and 34 cement producers. He used two approaches direct tests and yield test to examine the validity of the independent hypothesis. Direct tests were improved the relationship between the average cost of capital and the total market value. While, yield tests were improved to determine, whether yield increase from debt to some moderate debt range. This study provided that primary independent hypothesis between average cost of capital and capital structure was not acceptable. It did not conclude that equity yield is the linear function of leverage. In other words, direct test result supported the traditional view whereas; yield test result neither supported nor contradicted the MM hypothesis.

Modigliani and Miller (1966) in correction on their original hypothesis conclude that leverage has a tax advantage and value of the firm can be maximized when leverage measured by $DV/VL = 1$. In other words, cost of capital can be minimized, when equity financing is zero. MM (1966) tested tax advantage of leverage with the 63 samples of large electric utilities of USA for the years 1954, 1956 and 1957. In this test, they concluded that the leverage factor is significant only when tax advantage is involved. The implication of this study do not support the MM hypothesis whose it is similar to traditional theory of capital structure.

Wipporn (1966) conducted a study to test the empirical relationship between cost of capital and leverage. He tried to eliminate the principle problem of study on the leverage and attempted to offer what are hoped to be more fruitful alternatives in determining the relationship between leverage and cost of capital. He argued that the leverage either the ratio of debt to equity at book values, both of these measures contains important conceptual basis. He therefore used different measures of leverage viz. $I/E = 25$ Where, I is the current level of fixed charges; E is the most recent year cash flow operating income determined from logarithmic regression of income on time over ten years period, 25 is equal to two standard error around the regression line. He also included on certainly variables in his test equation to account for inter firm difference. He therefore has assumed in the past investigation that homogeneity

of business risk could be achieved by comparing firm in the same industry classification.

Sharma and Rao (1969) conducted the test of MM hypothesis on the influence of debt on the value of a firm to a non regulated industry. They argued that estimate of cost of capital arrived at through this model will be accurate only when their hypothesis on debt and dividends are correct, this is an essential condition for the employment of this model. For the study purpose, they used sample of 30 engineering equation for three cross-section years; 1962, 1964 and 1965. Calculations of variables were done in exactly the same ways that done by MM with two exceptions. They experimented with total assets and sales for deflecting the variable and the results were used as deflector. They argued that when the growth rate of total assets of fixed assets was used as the growth variable, the results were somewhat inconsistent with economic reasoning. They therefore took the earnings growth rate as the growth variable because this would take into account growth of earnings due both to the additional of new capacity. They included that debt has non tax advantages also. Thus, this paper support that the investors prefer corporate to personal leverage and value of firm. Therefore, the value of a firm rises up to a leverage rate considered prudent.

Rao and Litznberges (1970) conducted the study of the effect of capital structure on the cost of capital in less developed and less efficient capital market (India) and in a highly developed and efficient capital market (United States). They used 28 Indian utilities and 77 American utilities. They conducted the study for five cross- section years: 1962- 1966. They found that the result for the American utilities are constant to the MM proposition that except for the advantages of debt financing, the cost of capital is independent of capital structure, and the result also supported that the MM hypothesis that investors are indifferent for the firm's dividend policy. In case of financial leverage will lower the firm's cost of capital and investors have a preference for current dividends. In conclusion, they contended that the MM approach after allowing for the tax advantage of debt, the firm's cost of capital is independent of capital structure does not appear to be applicable in the case of a developing economy.

William Jackson's (1975) study on commercial bank regulation, structure and performance with reference to the empirical analysis using data covering 1644 banks over the period of 1969-1971. Relatively "Desirable" banking performance is associated with several traits, including bank asset size, non-bank competition, low cash holding, low labor cost, state non-member bank status, multi-bank holding company legislation national bank status, low time deposits and low equity capitalization. Demand levels and temporal variations also significantly affect banking. Moreover, some variables favorably associated with one performance characteristic may tend to be adversely related to another. The study thus suggests that traits associated with relative freedom to complete and efficient bank management, rather than ones associated with limits on financial competition have generally desirable effects on the performance of the banking industry.

Taggart (1985) in his study provides that an account on cellular trends in leverage by using verities of measurements. He concluded that there was increasing trend of leverage in USA since the Second World War. Taggart again found that debt was 45 percent of total sources of funds for USA non financial corporation. He further showed that the increasing trend of debt financing after the second world war till 1974 and decreasing trend after 1974. In his study, he showed that debt financing was used to an unprecedented extend during the period of 1974-86. It is argued that debt financing has come down to the level that is not high by historical standards after 1974.

2.6 Review of Nepalese Studies

There are various studies of capital structure of different firm but few are of industry. Most of the studies are dependent or mission oriented.

Dr. M.K. Shrestha (1980) on the journal of public administration, “Analysis of capital structure in selected public enterprises” under study has a very confusing capital structure, since they are not guided by objectives-based financial plans and policies. Ad holism became the basis of capital structure in many cases, where most of them want to eliminate debt if possible to relieve financial obligations. He further added that many cases provide very fantastic results on the calculation of equity-capitalization rate according to given data though some cases carry valid and meaningful results.

Another study conducted by **M.K. Sherstha (1980)** discloses that a performance of the selected banks is satisfactory. Liquidity is sufficient to meet the depositor’s claims, profitability is sufficient to meet the interest on deposits and rate of return on share capital is also favorable. However, the selected banks is explicitly depending more on borrowed fund and has a highly geared capital structure. The bank has to improve operational efficiency to achieve its higher profit goal and to maintain the market share under the intense competitive environment.

Rima Devi Shrestha (1985), in her independent studies of capital structure of 19 selected and listed companies comparing different sectors and other concluded that most of the companies are employing excess debt than equity capital and have faced loss on paying interest. As her study regards to the public enterprises she saw the dearth of capital management skill and recommended to develop suitable guideline to make public enterprises swear of their responsibility of repaying the debt schedule. Further, she blamed the concerned management of not maintaining transparent capital structure management.

On her second study on impact of capital structure, she included selected five listed companies, comprising manufacturing hotel, trading and service and found that there is adverse relation between dividend payout and value of firm. She further found

the negative relationship between ratios of market value of total assets with the size of total assets with the size of firm.

A thesis submitted by **Mahendra Mandal (1989)** on “Comparative financial performance appraisal of JVB’s” concluded that NGBL and NABL have mobilized the debt funds in proper way for generating more return but NIBL could not do as better as NABL and NGBL. He recommends enhancing banking facilities in rural area by encouraging small entrepreneur’s development Programs to play merchant banking role, to mobilize the deposit funds in productive sectors and to grant more priority to the local manpower.

A thesis submitted by **Ramesh Raj Aryal (1991)** on “An evaluation of capital structure of Bottlers Nepal Ltd” Finds that all the calculations show the bad performance of the company due to the inefficient capital structure management. The company is regarded as highly geared up capital structure structured company. Thus to design suitable pattern of capital structure for the company, the management must bring about a satisfactory compromise among these conflicting factors of cost, risk control and timing. He recommended that the company to shift debt capital to equity capital when the company have high earning per share.

Mr. Gopal Prasad Regmi (1998) has conducted “A study on capital structure management of Necon Air Limited”. The study showed that the company as operating with debt capital relatively higher than equity capital. So, he concluded that the company should make a drastic reduction in total debt capital and if it’s not possible, they need to issue more equity shares or convert preference share into equity share. He further added that the company should minimize its operational cost and apply technological based management to strengthen the company’s competitive capability. Apart from these strategies, he suggested that the company should adopt competitive strategy policy to balance with its different investors, as well as, identify and select the cost alternative financing from available fund.

Kamal Raj Pathak (1999) has conducted “A study on comparison of capital structure and profitability of Nepal Indosuez bank ltd. and Nepal Grind lays bank”. On this study he found that these banks are highly leveraged, so it was difficult for them to pay interest and principal that may ultimately led them to bankruptcy. There is no significant relationship between debts to equity ratio, fixed deposited to net worth and overall ratio of bank.

Phul Prasad Subedi (2004) has conducted a study on impact of capital structure on cost of capital and value of firm. He used 11 finance companies as a sample. The purpose of this study is to examine empirically the trend in using debt capital in response to market equity, impact of leverage on value of the firm, return on equity. This study used portfolio, correlation coefficient, coefficient of determination, simple as well as multiple regression equation to accomplish result. He found out that there is increasing trend in using debt relative to equity, use of leverage increase value of the firm and decrease cost of equity capital.

Suman Adhikari (2005) conducted a study on “Capital structure of selected JVB’s”. He used NABIL Bank, Standard Chartered Bank and Nepal SBI Bank as a sample. The NI Approach implies that proportion of higher leverage consequently increase the value of the firm. This approach is well acquainted with this study as the value of the banks has increased in accordance to the increasing position of leverage. The correlation analysis indicates that there is insignificant relationship between debt and return of NABIL and SBI. He suggests that banks are required to maintain improved capital structure by increasing equity base.

Poonam Bhattarai (2006) conducted a study on “Capital Structure of Manufacturing Companies in Nepal” using three leading Manufacturing Companies of Nepal. She concluded that some companies do not plan capital structure and it

develops as a result of the financial decisions taken by the financial manager without any formal planning. Those companies may prosper in the short run, but ultimately they will face great difficulties in raising funds to finance their activities.

Resham Raj Sharma (2007) conducted a study on “Capital Structure of selected commercial Banks in Nepal” using Nabil Bank, Himalayan Bank, Nepal Bangladesh Bank and SBI Bank as a sample. The objective of this study is to analyze the trend of paid up capital and the trend of Total Debt and Equity capital in these Banks. He found that paid up capital of commercial Banks in individual & aggregate term is in increasing trend. Total Debt to equity ratio of Nepalese commercial banks is too higher, which provides the way for conclusion of the banks are highly leveraged and highly risky and they are using higher proportion of outsiders funds in owning the total assets as well as total financing. Capital adequacy ratio reveals that the Nepalese Commercial banks are running with adequate capital and the capital fund of these institutions is sound and sufficient to meet the banking operation as per the NRB standard.

Suman Shrestha (2008) conducted a study on “Capital Structure of selected JVB’s”. He used Nabil Bank, Standard Chartered Bank, Himalayan Bank, SBI Bank and Nepal Bangladesh Bank as a sample. He uses different financial ratio, market related ratio and correlation analysis to analyze the capital structure and profitability position of selected Banks. He found on his study that NI approach is well acquainted with this study as the value the banks has increased in accordance to the increasing portion of leverage. The study also shows that banks have been successful in increasing their deposit and credit portfolio. The operating profits of all the private sector commercial banks have gone up, so has the provision for loan loss.

2.7 Research Gap

The review of above relevant literature has contributed to enhance the fundamental understanding and knowledge, which is required to make study meaningful and purposive. There has been lots of article published related to Capital Structure of commercial banks. There are various researches conducted on Capital Structure and its effect on Cost of Capital of commercial banks, impact and implementation of NRB guideline in commercial banks but there few researches conducted Capital Structure of commercial banks. However, no one has done a study on “Capital Structure” with Nabil Bank, Investment Bank and Bank of Kathmandu Limited. Therefore, the research attempts to study in this area. To know the Capital Structure of these three banks will probably be the first study of these banks in the subject matter.

So, this study will be fruitful to those interested person parties scholars, professor, students, businessman and government for academically as well as policy perspective.

Chapter Three

Research Methodology

For the analysis of the capital structure of selected commercial banks analytical as well as descriptive designs are applied to achieve the objective of the research. It involves detailed investigation in search of facts regarding the capital structure practice of Nepal. Various qualitative and quantitative techniques are used in order to achieve the objectives. Efforts are made to provide realistic pictures of the capital Structure situation of the Commercial banks through collection, analysis, presentation and interpretation of the relevant details.

3.1 Research Design

Research design is planned structure and strategy of investigation conceived to obtain answer to research objective through analysis of data. The first step of the study is to collect necessary information and data concerning the study. Therefore, research design means the definite procedure and technique, which guides the study and propounds ways or doing research. In this way a description and analytical survey will be done. The justification for the choice of these methods is preferred because it includes reliable data and information covering a long time and avoids means complex variables.

The research covers the three major joint venture commercial banks in Nepal particular in their Capital Structure practice. The research has its basic objective to figure out the problem therein and provide them with some recommendation. The literature has been reviewed specially from the post thesis conducted and the same aspects of the commercial Banks. The data for the research are of secondary types.

3.1.1 Sources of Data

The data presented in the study are secondary type. The annual reports of the concerned banks are the major sources of the data for the study. However, besides the annual reports of the subjected banks the following source of data shall also be used in the respective corner of the study.

1. NRB reports
2. Various publications dealing in the subject matter of the study
3. Various articles published in the News papers

Besides the above, any kind of other sources such as assertions, interviews, remarked by the specialist of those are capable improvising valuable data and conclusion, shall be considered in the study.

3.1.2 Data Collection Procedures

The Annual Report of concern bank was obtained from field visiting of these banks especially from their corporate office. NRB publication, such as Quarterly, Economic Bulletin, Banking and financial statistics, Economic Report, annual Report of NRB etc. has been collected from the personal visit of concerned department of NRB at Baluwatar. The data on some aspect of these banks was obtained from their respective Web sites.

3.2 Selection of the Banks as the Sample from the total Population

There are 25 commercial banks operating in the country. Due to the time limitation, to study all the banks will take a long time. In our study 3 banks are taken as sample.

3.2.1 Population

All the commercial banks operating in Nepal are considered as the population for the research. Thus, population size is 25. The sample used in this research is purposive in nature. 3 commercial banks cover 12% ($3/25 \times 100$) of population as sample.

3.3 Methods of Data Analysis

Mainly financial methods are applied for the purpose of this study. Appropriate statistical tools are used. Among them correlation analysis regarded as major one is used for this research.

Financial Tools

Capital structure ratios and some other major ratio are used in this study. Capital structure ratio is also defined as financial ratio.

1. Financial leverage ratio

The financial leverage indicates the relationship between the total debts to total assets of a firm. Financial leverage is simply the use of fixed cost such as debt. A high *financial leverage ratio* indicates possible difficulty in paying interest and principal while obtaining more funding.

$$\text{Financial Leverage} = \text{Total debt/Total Asset}$$

2. Debt-Equity ratio

Debt- Equity ratio is vital tool used to analyze the long-term solvency of a firm. This ratio equals the firm's debt divided by its equity, where debt can be defined as total debt or as long-term debt. Thus it is computed as:

$$\text{D/E ratio} = \text{Total Debt/Net worth}$$

3. Interest coverage ratio

It is also known as the time. Interest earned ratio. It is one of the most conventional coverage ratio used to test the firms debt serving capacity. The interest coverage ratio is thus computed as:

$$\text{Interest coverage ratio} = \text{EBIT/Interest}$$

Where,

$$\text{EBIT} = \text{Earnings before interest and tax}$$

4. Degree of financial leverage (DFL)

The degree of financial leverage is defined as the percentage change in EPS due to a percentage change in EBIT. When the economic condition is good the firm's EBIT is increasing, its EPS increase faster with more debt in capital structure.

$$\text{DFL} = \text{Percentage change in EPS/Percentage change in EBIT}$$

OR

$$\text{DFL} = \text{EBIT/EBIT-I}$$

5. Return on Total Asset ratio

This ratio measures the profitability with respect to total assets. This ratio is examined to measure the profitability of all financial resources invested in the bank's assets.

$$\text{Return on Total assets} = \text{Net Income/Total assets}$$

6. Return on Total deposits ratio

Major financial source of a bank is deposit, collection and deposits are mobilized for insurance, advances and in other investment to earn profit. This ratio helps to find out the profit earned using total deposits.

Return on total deposit = Net Income/Total Deposit

7. Return on shareholder's equity

A return on shareholder's equity is calculated to see the profitability of owner's investment. The shareholder's includes paid-up share capital, share premium and reserve and surplus less accumulated losses.

Return on shareholder's equity = Net profit after tax/shareholder's equity

Market related ratio

i. Earnings per share (EPS)

The profitability of the common shareholder's investment can also be measured in many other ways. One such measure is to calculate the earnings per share. It can be measured as:

EPS = Profit after tax/ Number of shares outstanding

ii. Dividend per share (DPS)

Dividend per share is the earning distributed to ordinary shareholders. It is measured as:

DPS = Dividend/ Number of share outstanding

iii. Dividend-payout ratio (DPR)

The dividend payout ratio is dividend per share divided by the earning per share. It can be computed as:

DPR = Dividend per share/Earning per share

The overall capitalization rate under NI approach

The NI approach is also known as relevant theory of capital structure. The formulas used to compute the value of the firm and overall capitalization rate under NI approach are as follows:

$$\text{Market value of firm} = \text{Market value of Debt} + \text{Market value of Stock}$$

OR

$$V = B + S$$

OR

$$K_o = \text{EBIT}/V$$

Equity capitalization rate under NOI approach

The equity capitalization rate under NOI approach can be calculated as:

$$\text{Equity capitalization rate} = \text{EAT} / \text{Market value of stock}$$

$$\text{OR,} \quad K_e = \text{EAT}/S$$

$$\text{OR,} \quad K_e = \text{NI}/S$$

Statistical Tools

For the purpose of the study simple statistical tools are used. Mainly financial tools and techniques have used to show the financial condition of the selected commercial banks. Hence, statistical tools used in the study are as follows:

I. Sampling

Firstly random sampling of commercial banks is done. For the purpose of the study 3 commercial banks are selected from 25 commercial banks in Nepal.

II. Tabulation

The raw data and the findings are shown in tabulated form to show the clear view and to make comparison easier. Many variables can be shown and the same graph and a comparison can be made.

III. Correlation Analysis

Correlation analysis measures the relationship between the variables. There are several methods of measuring correlation. In this research, Karl Pearson's method known as Pearsonian coefficient of correlation is used, which was simply denoted by the symbol 'r'.

To interpret the result obtained from calculation of 'r', following general rules are applied:

If the value of $r=+1$, there is perfect correlation between the variables.

If the value of $r=-1$, there is perfect negative correlation between the variables.

If the value of $r=0$, there is no relation between the variables.

The closer r is to $+1$ or -1 , the closer the relationship between the variables and the closer r is to 0 , the less close the relationship.

Study of correlation helps in decision making. In this research, the correlation between loans and net worth is examined by applying the following formula:

$$r = \frac{\sum dxdy}{\sqrt{\sum x^2} \cdot \sqrt{\sum dy^2}}$$

Here,

N = No. of pairs of x and y observed

X = Values of loans and advance

Y = Values of total deposit

R = Pearsonian correlation coefficient

IV. The probable error

The probable error of the coefficient of correlation helps in interpreting its value. With the help of probable error it is possible to determine the reliability of the value of coefficient in so far as it depends on the condition of random sampling. The probable error of the coefficient of correlation is obtained as follows:

$$E = 0.6745 \frac{1-r^2}{\sqrt{N}}$$

Here,

r = correlation coefficient

N = No. of pairs of observations

If the value of r is less than the probable error, there is no evidence of correlation i.e. the value of r is not at all significant. Then if the value of r is more than 6 times the probable error, the coefficient of correlation is practically certain i.e. the value of r is significant.

V. Coefficient of variation

The corresponding relative measure is known as the coefficient of variation. This measure developed by Karl Pearson, is most commonly used measure of relative variation. It is used to compare the variability of two or more than two series or group. Coefficient of variation is denoted by C.V. and is obtained as follows:

$$C.V. = \frac{s}{\bar{X}} * 100$$

Here,

s = Standard deviation

\bar{X} = Actual mean or Average

Chapter Four

Presentation and Analysis of Data

This chapter, the presentation and analysis of data constitute the most crucial part of the study. It provides a mechanism for meeting the basic objectives stated earlier in the first chapter of this research. The research has followed the methodology described in the third chapter in order to attain the objectives. Thus, application of the major variables taken into account for the purpose of the study are total debt and total assets, EBIT and PBT, Total Debt and Net Worth, NPAT and shareholders equity, EBIT and Interest, Net Income and Net Operating Income approach, co-efficient of correlation analysis of different variables of selected banks. This chapter is divided into four parts; including Descriptive analysis of different ratios, Analysis of market related ratios, analysis of Capital structure and analysis of correlation coefficients.

4.1 Descriptive Analysis of Ratios

The ratios of a firm by themselves do not reveal anything. For meaningful interpretation the ratios of a firm should be compared with the ratios of similar firms. Such comparison will reveal whether the firm is significantly out of line, the firm should undertake a detailed analysis to spot out the trouble areas. The study which is descriptive is conducted using each of the bank's financial statements for the last five fiscal years. Hence, various hypotheses on gauging the effectiveness of the banks are developed and tested using descriptive as well as statistical tools to analyze the compatibility to the banks.

4.1.1 Analysis of Financial Leverage

Financial leverage shows what portion of the capital assets is financed by outside funds. If successfully employed, this ratio benefits the shareholders, by raising their expected return-earnings per share. High ratio shows banks success in exploiting debt to be more profitable as well as it also indicates its riskier capital structure.

Table 4.1
Financial Leverage

Com. Banks/FY	2004	2005	2006	2007	2008	Average	S.D	C.V
NABIL	86.69	84.97	87.42	88.89	90.01	87.60	1.75	1.99
Investment	89.67	89.74	91.31	91.66	94.67	91.41	1.81	1.98
Bok	91.12	90.78	91.53	91.41	91.04	91.18	0.23	0.27
Average	89.16	88.54	90.09	90.65	91.92	90.07		

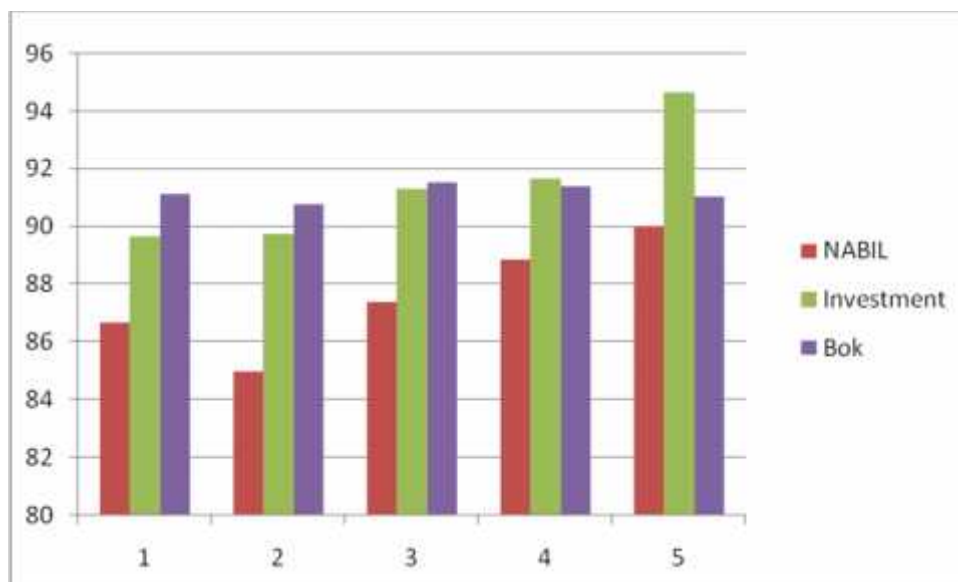
The computation from Table 4.1 of financial Leverage in terms of total debt to total assets reveals that the three commercial Banks are highly leveraged on Five years time horizon. It means the assets of selected banks have been financed more funds collected from creditors.

Nabil Banks total debt to total assets ratio is in increasing trend. The ratio over the five subsequent years is 86.69%, 84.97%, 87.42%, 88.89% and 90.01% respectively. On average, 87.60% of debt is used for financed for its assets and 12.40% is finance through Shareholder's Equity.

Investment bank's total debt to total assets ratio is 89.67%, 89.74%, 91.31%, 91.66%, and 94.67% respectively. On average, 91.41% of debt is used for financed for its assets, which is higher than Nabil Bank. The ratio is in increasing trend on the study period.

Bok total debt to total assets ratio is 91.12%, 90.78%, 91.53%, 91.41% and 91.04% respectively. The ratio is in increasing up to 2005 and then it is in decreasing trend. On the average, 91.18% of debt is used for financed for its assets.

The coefficient of variation shows that Nabil bank is in more risky position than investment and Bok. The CV of Bok is higher than other banks. In all five banks, the creditor’s margin of safety is very low which means they have high risk. All the banks are found using higher debt capital to finance their assets. On the basis of year wise average, Nabil bank has below the average ratio, and Bok has the above the average ratio, which indicate that Bok has used more debt on total assets than other banks. Above data can be clearly shown in the following chart.



4.1.2 Analysis of Debt-Equity Ratio

The debt-equity ratio is the relationship between borrowed funds and owner’s capital. It is determined to measure the firm’s obligations to creditors in relation to the funds invested by owners. A high debt-equity ratio implies that a proportion of long-term financing is from debt sources that are the firm is using a great deal of financial leverage. Long-term creditors generally prefer to see a modest debt-equity ratio since

it means greater protection and a greater stake in the company's future for equity holder.

The total debt includes current accounts, saving accounts, calls and short deposits, overdraft, fixed deposit, loan and advance and borrowing from other banks. Shareholder's equity or net worth includes paid-up capital, reserve, and surplus. The D/E ratio of five selected commercial Banks during the study period was as tabulated below:

Table 4.2
Debt Equity Ratio

Com. Banks/FY	2004	2005	2006	2007	2008	Average	S.D	C.V
NABIL	9.68	8.81	10.41	11.78	13.73	10.88	1.73	15.85
Investment	16.30	12.37	13.76	13.46	13.70	13.12	1.52	11.58
Bok	13.30	12.42	13.38	13.56	12.02	12.94	0.60	4.67
Average	13.09	11.20	12.52	12.93	13.15	12.30		

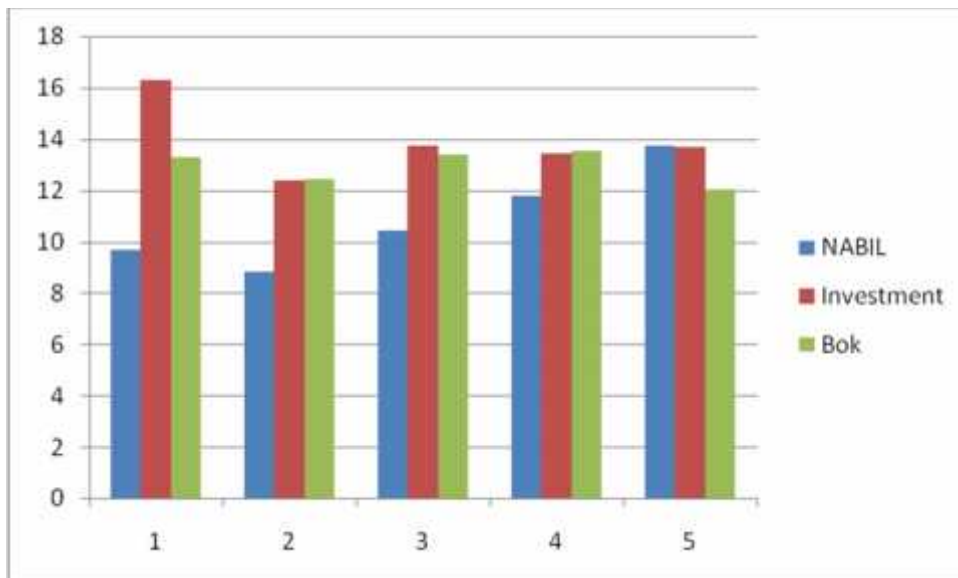
The ratio of the Nabil bank has ranged between 8.81 to 13.73 times. The average D/E ratio is 10.88 that mean the debt capital financing is more than 10 times higher than shareholders equity within the bank. Nabil Banks D/E ratio is in decreasing trend up to year 2005 and then it is in increasing trend up to study period. Hence the increasing trend of Nabil bank implies that the bank is adopting any consolidated strategy.

The ratio of Investment bank has ranged between 12.37 to 13.76 times. The average D/E ratio is 13.12 that mean the debt capital financing is more than 13 times higher than shareholders equity within the bank. Investment D/E ratio is in Fluctuating trend. It has higher D/E among other bank.

The ratio of Bok has ranged between 12.02 to 13.56 times. The average D/E ratio is 12.94 that mean the debt capital financing is more than 12 times higher than shareholders equity within bank. BOK banks D/E ratio is also in fluctuating trend. Bok Banks D/E ratio in year 2008 is 12.02, which is lowest over the study period. Hence

we can say that the bank is adopting a consolidated strategy. On the basis of year wise average, Investment bank and Bok have above the average rate in the entire study period and Nabil has below the average rate.

On the basis of coefficient of variance, Nabil bank's C.V. of D/E ratio is highest among selected Banks. It implies that Nabil Bank's ratio is higher fluctuated over the study period than other banks. Similarly, BOK has the lowest D/E ratio in comparison with other banks. It reveals that all 5 banks are highly leveraged. Thus it can be concluded that all the banks have lower ratio of shareholders equity over the creditor's claims. Above data are presented in the following chart.



4.1.3 Analysis of Interest Coverage Ratio

The Interest coverage Ratio also named as the times-interest earned ratio is used to test the firm's ability to pay interest out of earnings. This shows the number of times the interest charges are covered by funds that are ordinarily available for their payment.

Too high or too low ratio as well is unfavorable to the banks. Too high ratio implies unused debt capacity or a firm's conservativeness in using debt to its best advantage. Whereas, low ratio imply a danger signal that the firm is using excessive debt and does have the ability to offer assured payment of interest to the creditors.

Table 4.3
Interest Coverage Ratio

Com. Banks/FY	2004	2005	2006	2007	2008	Average	S.D	C.V
NABIL	3.71	4.91	3.81	2.66	2.20	3.46	0.95	27.48
Investment	1.73	2.21	1.95	1.82	1.66	1.87	0.19	10.35
Bok	1.48	2.13	1.87	2.00	2.07	1.91	0.23	12.13
Average	2.31	3.08	2.54	2.16	1.98	2.41		

Table 4.3 has been constructed to show the effect of interest coverage ratio of 5 year period. It is noticeable that leverage of Nabil has higher average Interest Coverage than Investment and Bok.

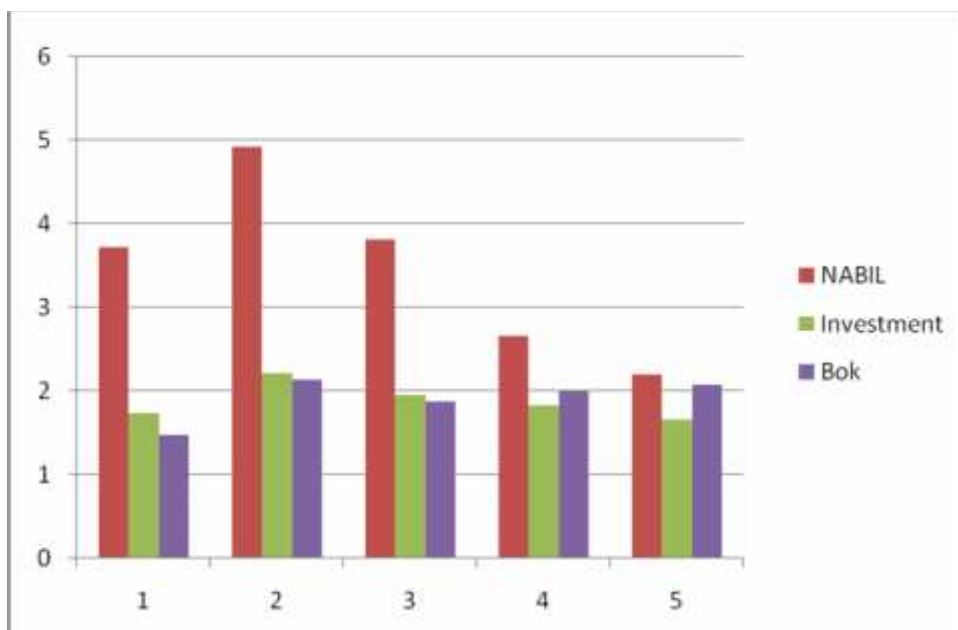
The interest coverage ratio of Nabil was 2.20 times in 2008, which was the lowest ratio over the study period. The ratio is in increasing trend to year 2005, and then it is in decreasing trend. It indicates that the bank was not able to maintain sufficient EBIT to meet the interest obligation in 5 years period. On an average, this ratio comes to 3.46.

The interest coverage ratio of Investment is 1.66 times in 2008, which was the lowest ratio over the study period. The ratio of Investment is also in increasing trend to year 2005, and then it is in decreasing trend It indicates that the bank was not able to maintain sufficient EBIT to meet the interest obligation in 5 years period. On an average, this ratio comes to 1.87.

The interest coverage ratio of BOK was 1.48 times in 1.48 in 2004, which was the lowest ratio over the study period. The ratio is in increasing trend over the study period. It indicates that the bank was able to maintain sufficient EBIT to meet the interest obligation in all 5 years. On an average, this ratio comes to 1.91. On the basis

of year wise average Nabil has above the average interest coverage ratio and other banks have below the average ratio. Which indicate that Nabil perform well than other banks.

The computed interest coverage ratio of 3 banks in above table shows how many times the interest charges are covered by funds that the ordinarily available to pay interest charges. Although generalization about what is an appropriate interest coverage ratio is difficult but higher ratio is preferred desirable. The CV of Nabil Bank is found highest than other banks. It depicts that Nabil is able to pay interest to its creditors than other banks operating under the same environment. Though the coverage ratio of banks is positive they should make effort to improve the prevailing situation by improving their operating efficiency to reduce amount of debt capital through refunding debt simultaneously. The above data are clearly shown in the following chart.



4.1.4 Analysis of Degree of Financial Leverage

It is stated that financial leverage refers to the use of interest bearing debt and preferred stock along the debt capital. The degree of financial leverage indicates the degree of financial risk, i.e. higher than value of financial leverage, higher the degree of financial risk and vice versa. The degree of financial leverage can be calculated as:

$$\text{DFL} = \frac{\text{Percentage Change in EPS}}{\text{Percentage change in EBIT}}$$

The degree of financial leverage employed by 3 selected banks has been shown in Table:

Table 4.4
Degree of Financial Leverage

Com. Banks/FY	2004	2005	2006	2007	2008	Average	S.D	C.V
NABIL	1.37	1.26	1.36	1.60	1.83	1.48	0.21	13.91
Investment	2.36	1.82	2.05	2.22	2.51	2.19	0.33	15.03
Bok	3.07	1.89	2.15	2.00	2.01	2.22	0.43	19.41
Average	2.27	1.66	1.85	1.94	2.12	1.96		

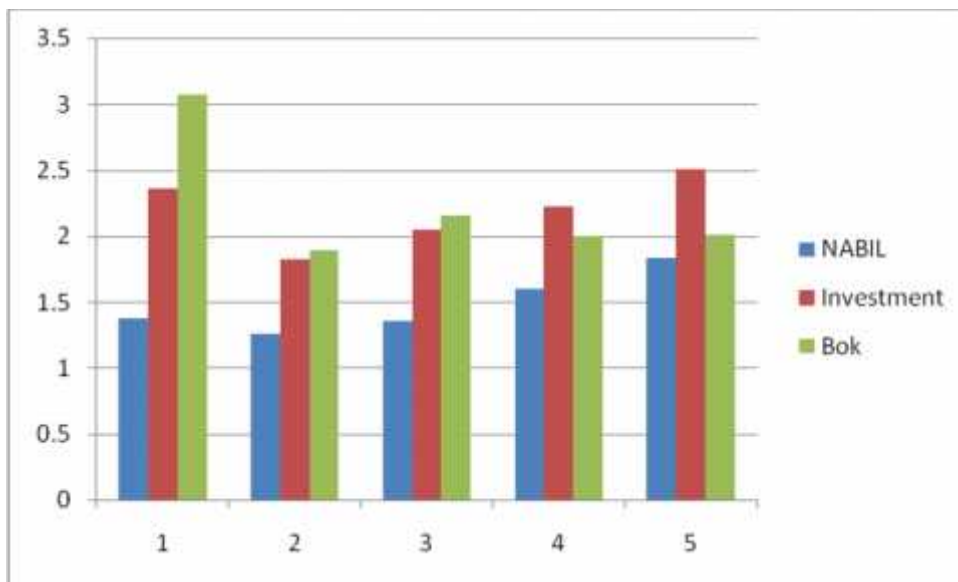
The degree of financial leverage of Nabil Bank is highest of 1.83 times in 2008. It implies that if the bank is able to increase EBIT by 100%, then it will lead to 183% increase in EPS. The DFL of this bank is 1.37 times in year 2004, which is decrease to 1.26 times in year 2005, then is in increasing trend up to 2008. Nabil Bank degree of financial leverage on an average is 1.48 times i.e. 183%.

The degree of leverage of Investment Bank is highest of 2.51times in 2008. It implies that if the bank is able to increase EBIT by 100%, then it will lead to 251% increase in EPS. The DFL of this bank is 2.36 in year 2004, which is decrease to 1.82 times in year 2005, and then it is in increasing trend up to 2008. Investment Bank's degree of financial leverage on an average is 2.19 times i.e. 219%.

The degree of financial leverage of BOK is highest of 3.07 times in 2004.it implies that if the bank is able to increase EBIT by 100%, then it will lead to 307% increase in EPS. The DFL of this bank is decrease in year 2005 to 1.89 times, and then it is increase to 2.15 times. Again it decreases to 2.00 times and 2.01 times in the year 2008. Its degree of financial leverage on an average is 2.22 times i.e. 222%. On the

basis of year wise average Nabil has lower rate than average rate and other banks have higher rate than average ratio.

On an average, BOK (19.41) has the highest CV of degree of financial leverage and Nabil has the lowest (13.91). The variability of ratio in between high and low CV is 19.41 to 13.91. Nabil has the lowest ratio of 148% on an average. Similarly on an average the ratio of Investment and Bok are 2.19 and 2.22 respectively. Hence it can be figured that Bok is the riskier bank in terms of degree of financial leverage. The Above data are presented in the following chart.



4.1.5 Return on Total Assets

Returns on Total Assets ratio measures the profitability of bank that explains a firm to earn satisfactory return on all financial resources invested in the bank’s assets; otherwise its survival is threatened. The ratio explains net income for each unit’s of assets. Higher ratio indicates efficiency in utilizing its overall resources and vice versa. Rate of return on total assets is major tool to judge the operational efficiency of firm.

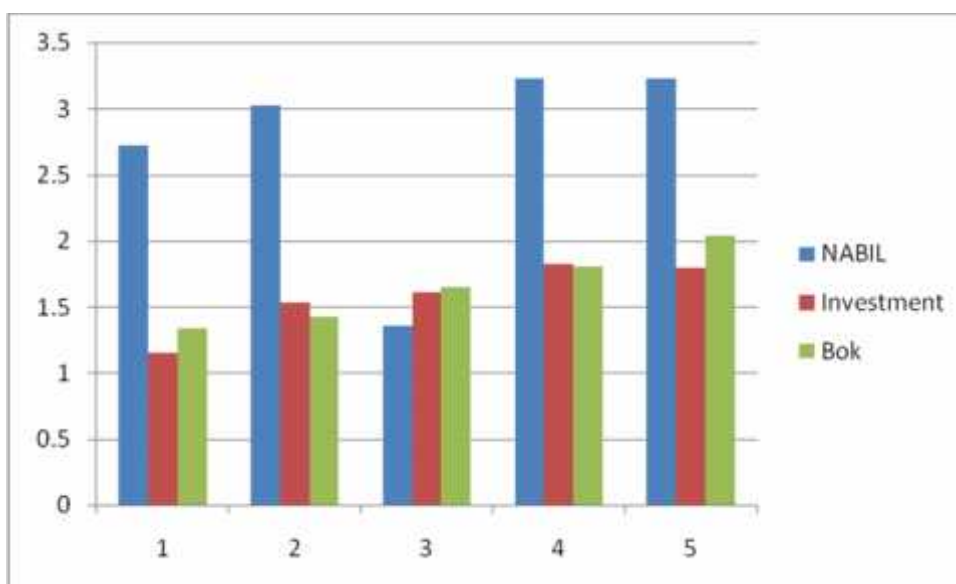
Table 4.5
Return on Total assets

Com. Banks/FY	2004	2005	2006	2007	2008	Average	S.D	C.V
NABIL	2.72	3.02	1.36	3.23	3.23	2.69	0.43	15.99
Investment	1.15	1.53	1.61	1.82	1.79	1.58	0.24	15.24
Bok	1.34	1.42	1.65	1.80	2.04	1.65	0.25	15.15
Average	1.74	1.99	1.54	2.28	2.35	1.97		

All the banks have increasing trend of return on total assets ratio over the study period.

Nabil has higher rate than other banks, hence Nabil has outperformed other banks. Nabil has been able to utilize its resources in most profitable projects than that of other banks. The CV of BOK is found to be lowest among the other banks. Nabil has the highest C.V ratio which shows that the variability of the ratio is higher. The C.V ratio of Investment Bank is 15.15.

On an average, Investment Bank has the poorest return on total assets of 1.58%, which constitutes that it has to be more alert in future to utilize its resources to more profitable projects. On the basis of year wise average, Nabil bank has the higher rate than average rate and other banks have lower rate than average rate. The above data are presented in the following chart.



4.1.6 Return on Total Deposits Ratio

Return on total deposits ratio assist to identify the banks overall performance as well as its success in generating profit. The ratio here is calculated in order to diagnosis whether the banks are well, efficient or not in mobilizing its total deposits so that corrective action be forwarded to concerned banks.

Higher ratio signifies better mobilization of deposits and vice versa.

Table 4.6
Return on Total Deposits Ratio

Com. Banks/FY	2004	2005	2006	2007	2008	Average	S.D	C.V
NABIL	3.22	3.56	3.28	2.89	2.33	3.06	0.42	13.77
Investment	1.32	1.63	1.85	2.05	2.02	1.77	0.27	15.32
Bok	1.65	1.56	1.93	1.12	2.02	1.91	0.27	14.29
Average	2.06	2.25	2.35	2.02	2.12	2.25		

Nabil Bank's return on total deposits over the study period ranged between 2.33% to 3.56%. The bank has in increasing trend up to year 2005, and then it is in decreasing trend. It have highest rate in the year 2005 i.e. 3.56%.

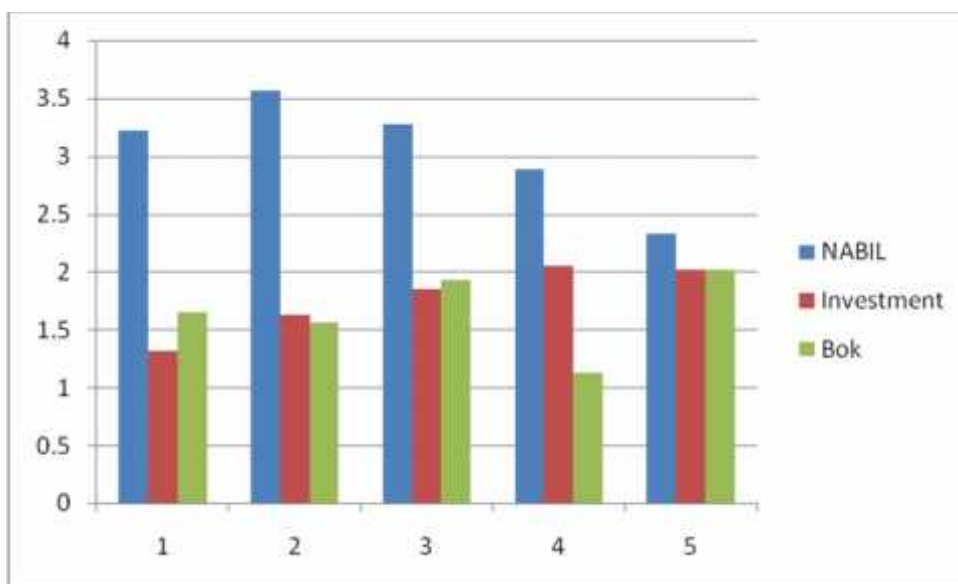
Investment Bank's return on total deposits over the study period ranged from 1.32% to 2.05%. The bank has in increasing trend. The highest rate is 2.05% in the year 2007.

BOK Bank's return on total deposits over the study period ranged from 1.12% to 2.02%. The bank has in increasing trend up to year 2006, and then it is decrease to 1.12% in the year 2007.the highest rate of BOK in study period is 2.02% in the year 2008.

On an average, Nabil registered highest return on total deposits of 3.06%. This bank was able to utilize deposits from where the bank can earn more interest. Investment Bank has the lowest return on total deposits of 1.77%. Bok has 1.91% of return on total deposit ratio. On year wise average, Nabil has higher rate than average

rate and other banks have lower rate than average rate, which indicate that Nabil performed well than other two banks.

Considering CV of Banks, Investment has relatively higher than other banks, like wise Nabil has the lowest CV. Hence, the variability of ratio among high and low ratio of CV is 13.77 to 15.32. Though all the banks have maintained profitability, it can be said to be satisfactory. The CV of Bok is 14.29%. There is significant difference in return on deposits between three banks though operating under same environment. The Above data can be clearly shown in the following chart.



4.1.7 Analysis of Return on Shareholder's Equity

A return on shareholder's equity is calculated to see the profitability of owner's investment. ROE indicates how well the firm has used resources of owners. Management's objective is to generate the maximum return on shareholder's investment in the firm. ROE is therefore the best single measure of the company's success in fulfilling its goal. Thus, this ratio is of great interest and value to the present as well as the perspective shareholders, and also of great concern to management, which has the responsibility of maximizing the owner's welfare. The ratio equals the net profit after taxes divided by the common stockholder's equity.

$$\text{Returns on shareholder's equity} = \frac{\text{Net Profit after Tax}}{\text{Shareholder's Equity}}$$

Table 4.7
Return on Shareholder's Equity

Com. Banks/FY	2004	2005	2006	2007	2008	Average	S.D	C.V
NABIL	30.73	31.29	33.88	32.76	30.63	35.84	4.18	11.66
Investment	20.93	19.67	24.77	26.68	25.93	23.59	2.79	11.82
Bok	19.59	19.36	24.11	26.72	26.94	23.34	3.31	14.19
Average	23.75	23.44	27.59	28.72	27.05	27.59		

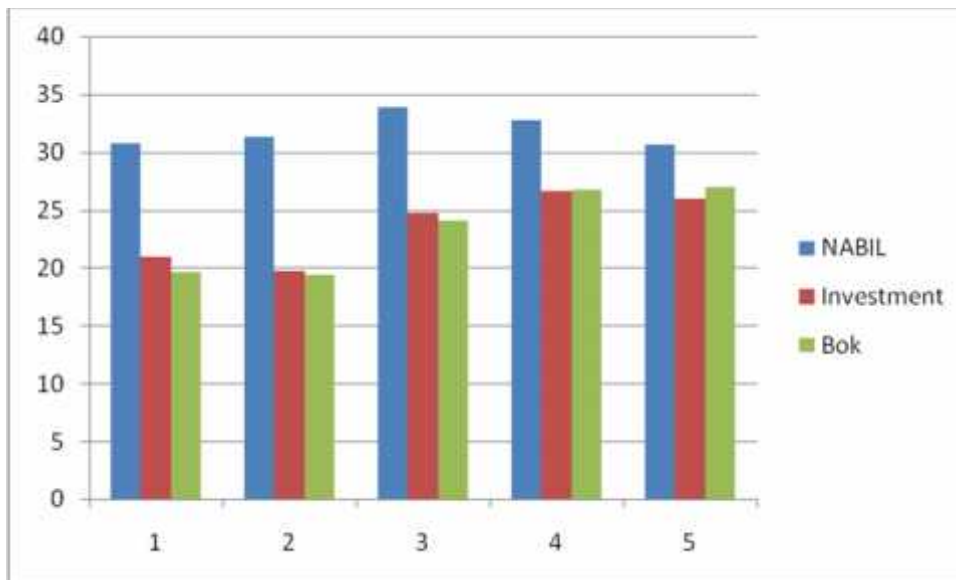
Table 4.7 shows the analysis of return on shareholders equity of five selected banks over the five years of time horizon.

Return on shareholder's equity of Nabil has fluctuating in nature. The ratio varied from a minimum 30.63 in 2008 to a maximum 33.88 in 2006. The bank registered decreasing trend in first 2 year then increasing trend for next 2 year and then again in deceasing trend. This reveals that there has not improvement in utilizing shareholder's funds in last year. The average return of Nabil is 35.84% in the five years study period, which is highest among other banks.

Investment Banks has maximum return on shareholder's equity in year 2007 of 26.68% which has decline to 25.93% in 2008. The lowest return on shareholder's equity of Investment Bank is 19.67% in 2005. The average return of Investment is 23.59% in the five years study period.

Bok has registered the ranges from 19.36% to 26.94% among five years periods. The bank has decreasing trend in first 2 year and then it in increasing trend. This reveals there has been improvement in utilizing the shareholder's funds in last three years. The average return of BOK is 23.34% in the five years study period. On year wise average, Nabil has higher rate than average rate and other banks have lower rate than average rate, which indicate that Nabil performed well than other two banks.

On the basis of C.V. BOK has highest among all, which explains that the variability of return on shareholder's equity is quite higher than remaining banks. While comparing the ratios of ROE on an Average among selected banks, Nabil has higher percentage of return and BOK has lower percentage of return. The above result are presented in the following chart.



4.2 Market Related Ratios:

4.2.1 Earnings Per Share

Earnings per Share simply show the profitability of the firm on a per share basis, it does not reflect how much is paid as dividend and how much is retained in the business. EPS is one of the most widely used measures of the bank's performance. It is an important index of the bank's performance and the investor rely heavily on it for their investment decisions.

In order to see the strength of the share in the market, EPS of Selected Commercial Banks are as below:

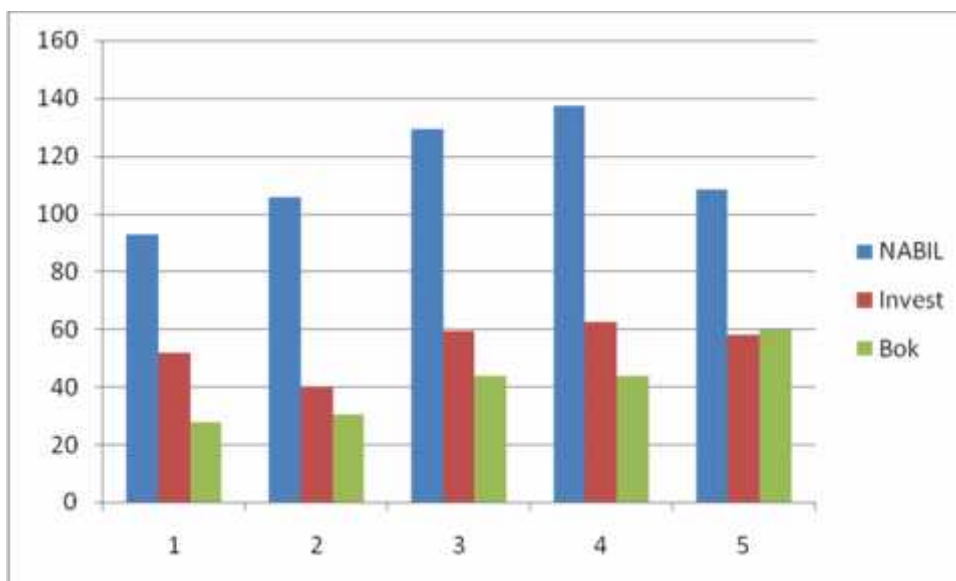
Table 4.8
Earnings Per Share

Banks/ FY	2004	2005	2006	2007	2008	Average	S.D	C.V
NABIL	92.61	105.49	129.21	137.08	108.31	114.54	15.05	13.14
Invest	51.70	39.50	59.35	62.57	57.87	54.19	8.15	15.04
Bok	27.50	30.10	43.67	43.50	59.94	40.94	11.60	28.33
Average	57.27	58.36	77.41	81.05	75.37	69.89		

In comparison among selected banks, Nabil has significant EPS than other banks. Nabil has increasing trend of EPS up to year 2007 and then it is decrease to 108.31 in 2008. Investment bank has fluctuating trend in EPS. It varies from 39.50 to 62.57 in the five year study period.

BOK has lowest EPS compared to other selected Banks. It has increasing trend in EPS in the study period. EPS of BOK is 27.50 in 2004 and 59.94 in 2008. On year wise average, Nabil has higher rate than average rate and Investment bank has lower rate than average rate, which indicate that Nabil performed well than other two banks. Bok has the lowest rate than other banks.

On the basis of average, Nabil has highest EPS of 114.54 and BOK has lowest average EPS of 40.94. Investment Banks average EPS is 54.19. Regarding coefficient of variation, EPS of BOK is found more fluctuating among the banks as is has highest C.V. of 28.33. Nabil has lowest C.V. of 13.14, which shows than it has less fluctuating EPS over the study period. EPS of Nabil gives the strength of the share better in the market than other banks. The above are clearly shown in the below chart.



4.2.2 Dividend Per Share

Companies generally prefer to pay cash dividends. They finance their expansion and growth by issuing new share or borrowing. Companies like to follow a stable dividend policy does not constitute constant DPS, but a reasonably predictable policy.

Table 4.9
Dividend Per Share

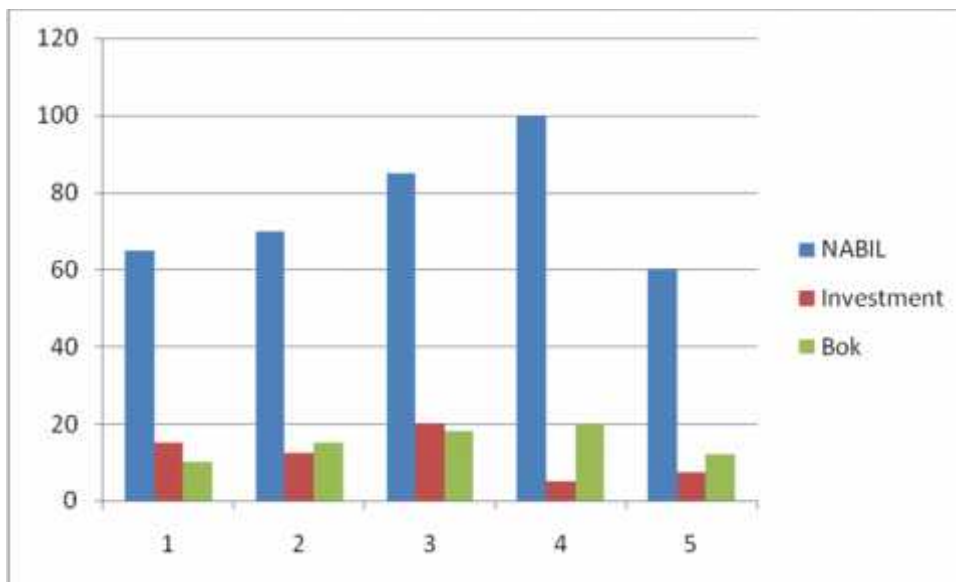
Com. Banks/FY	2004	2005	2006	2007	2008	Average	S.D	C.V
NABIL	65	70	85	100	60	76	14.63	19.25
Investment	15	12.5	20	5	7.5	12	5.34	44.49
Bok	10	15	18	20	12.11	15.02	3.67	24.43
Average	30	32.5	41	41.67	26.54	34.34		

Nabil found to be paying 76% cash dividend per share in average. In 2007, the bank declared 100% cash dividend. Investment distributed 12% cash dividend in average. Bok has distributed 15.02% cash dividend in average.

Among all selected commercial banks, Nabil Declairs highest cash dividend in the five years study period. The ratio of Nabil is in increasing trend up to year 2007 and then it is in deceasing trend. Investment bank declared lowest cash dividend 5% in

2006. Investment banks DPS is in increasing trend up to 2006 then it is in decreasing trend. BOK has also increasing trend in DPS. Its DPS ranged from 12.11% to 20%. On year wise average, Nabil has higher rate than average rate and other banks have lower rate than average rate, which indicate that Nabil has paid dividend well than other two banks.

On the basis of coefficient of variation, Investment has highest C.V. of 44.29 and Nabil has lowest C.V. of 19.25. Coefficient of variation of BOK is 24.43%. It reveals that dividend per share of Investment bank is fluctuating than other selected banks. The above results are shown in the following chart.



4.2.3 Dividend Payout Ratio

The ratio represents the percentage of the profit distributed as dividend and the percentage retained as revenue and surplus for the growth of the bank. The shareholders prefer usually higher ratio where as a very high ratio may also slow down the growth rate of the firm. It helps to segregate the proportion of dividend and retained earnings. Important of DPS lays in its ability to state the dividend policy of the concerned banks more obviously which influences the market value of the share.

Dividend payout ratio of selected banks is formulated in below table.

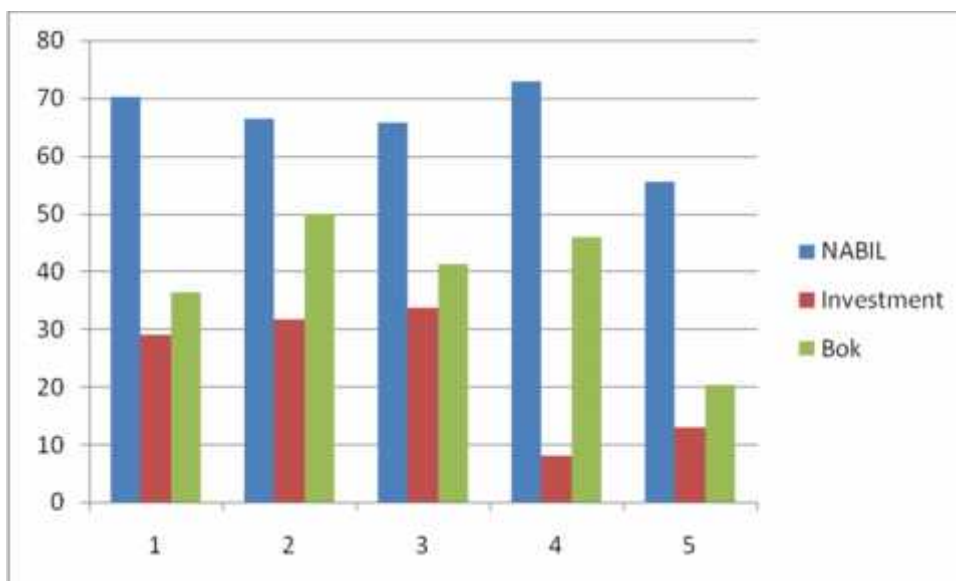
Table 4.10
Dividend Payout Ratio

Com. Banks/FY	2004	2005	2006	2007	2008	Average	S.D	C.V
NABIL	70.18	66.36	65.78	72.95	55.40	66.13	5.97	9.03
Investment	29.01	31.65	33.70	8	12.96	23.06	10.50	45.52
Bok	36.36	49.83	41.22	45.98	20.20	38.72	10.30	26.62
Average	45.18	49.28	46.9	42.31	29.52	42.64		

The Dividend payout ratio of Nabil is ranged from 55.40% to 72.95%. Nabil banks DPR is in decreasing trend in first 3 years. The Dividend payout ratio of Investment bank is ranged from 8% to 33.70%. Investment banks DPR is in increasing trend in first 3 year, and then it is dramatically decreases. The Dividend payout ratio of BOK is ranged from 20.20% to 49.83%.

Nabil bank has highest average DPR of 66.13% among other bank. Likewise, Investment Bank has lowest DPR of 23.06% among other bank. BOK has average DPR of 38.72%. On year wise average, Nabil has higher rate than average rate and other banks have lower rate than average rate, which indicate that Nabil performed well than other two banks.

On the basis of coefficient of variation of DPR, Investment bank has highest C.V. of 45.52%, which indicate that Investment bank has more fluctuating DPR compared to other selected banks. Likewise, Nabil has lowest C.V. of 9.03% and BOK has 26.62%. The above data are clearly shown in the following chart.



4.3 Analysis of Capital Structure

The analysis of capital structure is a concept of vital importance for this study. Here, both NI and NOI approach are considered to analyse the capital structure of the overall capitalization.

4.3.1 Net Income (NI) Approach:

$$K_o = \text{EBIT} / V$$

The overall capitalization rate of selected banks (Viz, Nabil, BOK, and NIB) under NI approach is as shown in Table.

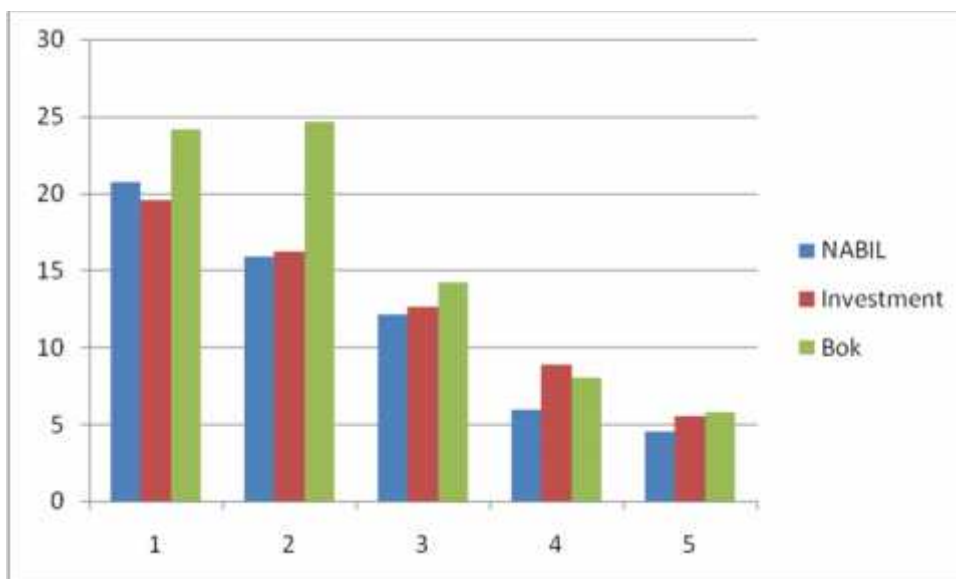
Table 4.11
Overall Capitalization Rate under NI Approach

Com. Banks/FY	2004	2005	2006	2007	2008	Average	S.D	C.V
NABIL	20.76	15.84	12.13	5.90	4.55	11.84	6.07	51.25
Investment	19.55	16.19	12.64	8.83	5.52	12.55	5.01	39.92
Bok	24.19	24.69	14.23	8.04	5.75	16.38	9.17	55.98
Average	21.5	10.68	13	7.59	5.27	13.59		

Over viewing the above calculated overall capitalization rate, BOK has the highest rate on average, i.e. 16.38% and Nabil has the lowest rate on average i.e. 11.84%.

Nabil has maximum Ko of 20.76% in the year 2004 and minimum Ko of 4.55% in the year 2008. The Ko of Nabil is in decreasing in the entire study period. Investment Bank has maximum Ko of 19.55% in the year 2004 and minimum Ko of 5.52% in the year 2008. It is also in the decreasing trend. The maximum Ko of BOK is 24.69% in the year 2005 and minimum Ko of 5.75% in the year 2008. On year wise average, Bok has higher rate than average rate and Nabil bank has lower rate than average rate. Investment bank has lower rate than average rate in first three years then it has higher rate in later years.

On the basis of C.V. all banks have highly leveraged Ko, which shows the maximum risk. BOK has highest C.V. i.e. 55.98%, which indicates that BOK is the more risky than other selected bank. Likewise, Investment bank has lowest C.V. i.e. 39.92%. Nabil has C.V. of 51.25%.



4.3.2 Net Operating Income (NOI) Approach:

The net operating income approaches also known as the irrelevancy theory of capital structure implies that the market value of the firm is not affected by the capital structure changes.

The NOI approach is considered to find out and analyze the equity capitalization rate of Nabil, Bok and NIB. Thus, Table has been constructed to demonstrate the effect of equity capitalization rate under NOI approach.

Table 4.12
Equity Capitalization Rate under NOI Approach

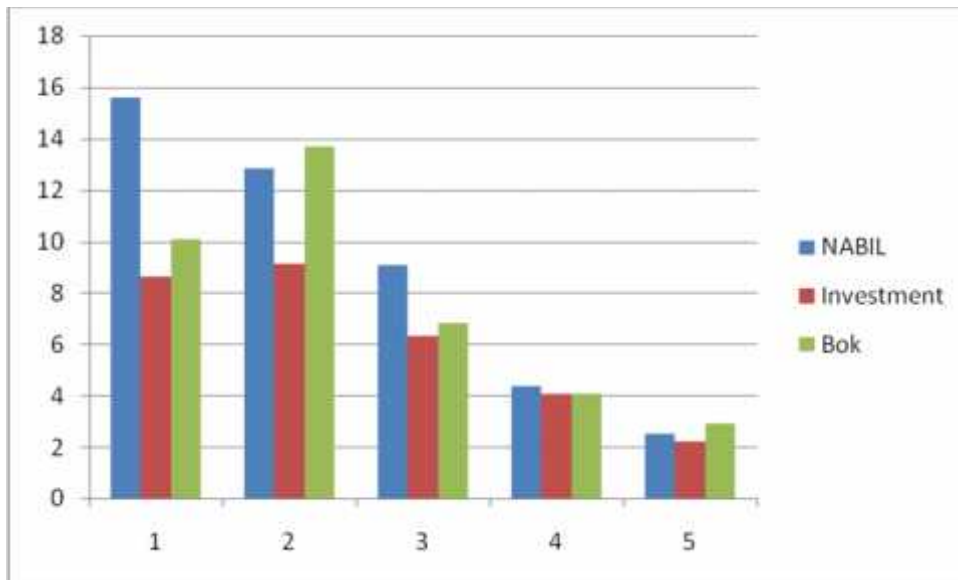
Com. Banks/FY	2004	2005	2006	2007	2008	Average	S.D	C.V
NABIL	15.61	12.86	9.10	4.37	2.51	8.89	4.94	55.59
Investment	8.63	9.15	6.30	4.04	2.22	6.07	2.65	43.61
Bok	10.10	13.68	6.80	4.07	2.93	7.52	3.96	52.62
Average	11.45	11.89	7.4	4.16	2.55	7.49		

Over viewing the above computed equity capitalization rate, equity cost of all five banks was fluctuating in nature.

The equity capitalization rate of Nabil has ranges between 2.51% and 15.61%. It has decreasing trend equity capitalization rate. The equity capitalization rate of Investment bank has ranges between 2.22% to 9.15%. Its equity capitalization rate is increase to 9.15% from 8.63% in the previous years, after that it is in decreasing trend. The equity capitalization rate of BOK has ranged from 2.93% to 10.10%. It has also decreasing trend of Ke.

Nabil has the highest rate of average equity capitalization rate i.e. 8.89% and Investment has the lowest average rate of return i.e. 6.07%. The average rate of BOK is 7.52%. On the basis of year wise average, Nabil has higher rate than average return. Investment has lower rate and Bok has fluctuating rate.

On the basis of C.V., Nabil has the highest C.V. of 55.59%, which indicate that Nabil bank has more fluctuating rate than other bank. Investment bank has the lowest C.V. of 43.61%. Bok has the C.V. of 52.62%.



4.4 Correlation Analysis

4.4.1. Coefficient of Correlation between EBIT and Interest Payment.

The relation between EBIT and Interest payment is evaluated in order to measure debt-serving capacity of the banks. It is assumed that there is significant relationship between EBIT and Interest payment. Here, interest payment (X) is dependent and EBIT (Y) is independent variable. The following result is obtained for three selected commercial banks.

Table 4.13

Correlation between EBIT and Interest Payment

Evaluation Criterion

Bank	R	R ²	E	6E	Relationship	Significant/Insignificant
NABIL	0.093	0.008	0.29	1.79	Positive	Insignificant
Invest	0.099	0.009	0.29	1.79	Positive	Insignificant
BOK	0.89	0.792	0.06	0.38	Positive	Significant

From the above analysis, its clear that the correlation between EBIT and interest payment incase of Nabil is 0.093, which show positive relationship. It infers that increase in EBIT increases interest payment. Coefficient of determination (r^2) of Nabil is only 8%, indicates that 8% of the variation in the interest payment is explained by the independent variable EBIT. Considering the probable error, (E) the value of 'r' is less than six times of the probable error. This indicates that there is no significant relationship between the variables i.e. the EBIT of Nabil is insignificant in generating interest payments. Similarly Investment also shows the insignificant relationship between the EBIT and interest payment though the correlation is positive.

On the other hand correlation between EBIT and interest payment in case of BOK show higher positive relationship. Coefficient of variation of BOK indicates that 79% of the variation in interest payment is explained by the independent variable EBIT. Considering the probable error, the value of 'r' of is higher than six times of the E. therefore, it is depicted that the value of 'r' in BOK is significant i.e. there is significant relationship between EBIT and interest payment. It depicts that the bank is significantly able to service its debt.

4.4.2. Correlation of Coefficient between Overall Capitalization Rates (X) and Debt-Equity Ratio (Y)

Correlation of coefficient between overall capitalization rate (X) and debt-equity ratio (Y) in terms of total debt to net worth is calculated in order to measure whether increase in the debt-equity ratio decreases overall capitalization of the banks. Applying Karl Pearson's correlation coefficient following result is obtained.

Table 4.14

Correlation Coefficient between Ko and D/E Ratio

Evaluation Criterion

Bank	R	R ²	E	6E	Relationship	Significant/Insignificant
NABIL	0.98	0.96	0.011	0.07	Positive	Significant
Invest	0.99	0.98	0.007	0.04	Positive	Significant
BOK	0.48	0.23	0.232	1.39	Positive	Insignificant

From the above analysis, its clear that the correlation between overall capitalization rate and Debt Equity ratio incase of Nabil is 0.98, which show positive relationship. Coefficient of determination (r^2) of Nabil is only 96%, indicates that 96% of the variation in the D/E is explained by the independent variable Ko. Considering the probable error, (E) the value of 'r' is less than six times of the probable error. This indicates that there is no significant relationship between the variables i.e. the Ko of Nabil is insignificant. Similarly Investment also shows the insignificant relationship between the Ko and D/E ratiopayment though the correlation is positive.

On the other hand correlation between overall capitalization rate and Debt Equity ratio in case of BOK show higher positive relationship. Coefficient of variation of BOK indicates that 23% of the variation in D/E ratio is explained by the independent variable Ko. Considering the probable error, the value of 'r' of is higher than six times of the E.

4.4.3. Correlation of Coefficient between Total Debt and Shareholder's Equity.

Correlation of coefficient between Total Debt (X) and Shareholder's equity ratio (Y) in terms of total debt to shareholder's equity is calculated in order to measure

whether increase in the debt decreases equity of the banks. Applying Karl Pearson's correlation coefficient following result is obtained.

Table 4.15
Correlation Coefficient between Total Debt and Shareholder's Equity

Evaluation Criterion

Bank	R	R ²	E	6E	Relationship	Significant/Insignificant
NABIL	-0.86	0.74	0.078	0.47	Negative	Significant
Invest	0.44	0.19	0.243	1.46	Positive	Insignificant
BOK	0.14	0.02	0.295	1.77	Positive	Insignificant

From the above calculation correlation between Total debt and shareholder's equity of Nabil is (-0.86), which indicates highly negative relationship. As to the other bank, correlation between Total debt and shareholder's equity of investment is 0.44 and BOK is 0.14, which indicates the positive relationship.

The relationship between total debt and shareholder's equity of Nabil is Significant, cause the 'r' is less than the six times the E. Hence, it is can be concluded that value or 'r' is insignificant and there is no proper relationship between total debt and shareholder's equity.

On the other hand 'r' is less than six times the E in case of Investment and BOK, Which indicates than there is insignificant relationship between total debt and shareholder's equity of Investment and Bok.

4.7 Major Findings of the Study

In the research data mainly secondary data are used and the analysis is computed with the help of different financial and statistical tools. In financial tools ratio analysis has been used and on statistical tools correlation coefficient analysis has been used. A primary data analysis is done from the information collected from structured interview with the concerned banks officials. This chapter focuses on the major findings from analysis of Nabil Bank Limited, Bank of Kathmandu Limited and Nepal Investment Bank Limited from the year 2003/04 to 2007/08.

The major findings of the financial and statistical analysis are presented below serially.

1. Financial Leverage in terms of total debt to total assets reveals that the three commercial Banks are highly leveraged on Five years time horizon. It means the assets of selected banks have been financed more funds collected from creditors. The coefficient of variation shows that Nabil bank is in more risky position than investment and Bok.
2. Debt Equity Ratio shows that the three commercial Banks are using debt higher than equity. As comparing to Banks Investment used highest debt than other Banks. On the basis of C.V. Nabil has more fluctuating ratio than other banks, which indicates that Nabil has more risky ratio than other Banks.
3. The computed interest coverage ratio of 3 banks in above table shows how many times the interest charges are covered by funds that the ordinarily available to pay interest charges. The CV of Nabil Bank is found highest than other banks. It depicts that Nabil is able to pay interest to its creditors than other banks operating under the same environment. Though the coverage ratio of banks is positive they should make effort to improve the prevailing situation by improving their operating efficiency to reduce amount of debt capital through refunding debt simultaneously.

4. The degree of financial leverage reveals the effect of percentage change on EBIT on the EPS. Bok has the highest degree of leverage, which indicates that it is the more risky bank, than other banks.
5. Returns on Total Assets ratio measures the profitability of bank. All the banks have increasing trend of return on total assets ratio over the study period. Nabil has higher rate than other banks, hence Nabil has outperformed other banks. Nabil has been able to utilize its resources in most profitable projects than that of other banks. The above calculation shows that all banks have satisfactory return.
6. Return on total deposits ratio shows the how efficiently banks mobilize its deposit to generate profit. Nabil registered highest return on total deposits of 3.06%. This bank was able to utilize deposits from where the bank can earn more interest. Study shows that all the banks have maintained profitability, it can be said to be satisfactory.
7. ROE indicates how well the firm has used resources of owners. Above calculation shows that Nabil has decreasing trend, which shows that it has failed to utilize the owner's fund. Bok has well performed than other bank.
8. In comparison among selected banks, Nabil has significant EPS than other banks. All the banks have increasing trend of EPS in the study period. Regarding coefficient of variation, EPS of BOK is found more fluctuating among the banks.
9. Dividend per share shows that Nabil has paid highest cash dividend than other banks. Investment bank has paid lowest cash dividend. Shareholder's preferred to invest in that security, which provide higher dividend.
10. Dividend payout ratio reveals that Nabil has distributed its profit as dividend to shareholders than other banks. Investment bank has distributed lowest dividend as compared to other banks.
11. Overall capitalization rate under NI approach reveal that Bok has highest rate of return. The NI approach implies that proportion of higher leverage

consequently increase the value of the firm. This approach is well acquainted with this study as the value of the banks has increased in accordance to the increasing portion of leverage. The K_o of five banks is positive even though the rate of return is in decreasing trend.

12. The Overall Capitalization rate under NOI approach shows that all the banks have decreasing trend of rate of return.
13. Correlation between EBIT and interest payment shows that there is a positive relation between EBIT and interest payment of three banks, which show positive relationship. It infers that increase in EBIT increases interest payment. Nabil and Investment banks have shown insignificant relation between these two variable, whereas, Bok has shown the significant relation.
14. Correlation between k_o and D/E ratio shows that there is a positive relation between K_o and D/E ratio of three banks, which show positive relationship. Nabil and Investment banks have shown insignificant relation between these two variable, whereas, Bok has shown the significant relation.
15. Correlation between Total debt and shareholder's equity of Nabil bank has that there is a negative relation between total debt and shareholder's equity. Whereas, Investment and Bok have positive relation. Nabil bank has shows a significant relationship between total debt and shareholder's equity, and Investment Bank and Bok have insignificant relationship.

Chapter Five

Summary, Conclusion & Recommendation

5.1 Summary

This concluding chapter deals with the findings in a logical and rational manner to the problem of research within the framework stated in introduction chapter. The relevance of the related ratios to the capital structure and their contribution to analysis are described in this chapter. Similarly, this chapter is also related with the findings and conclusions derived from the study of the selected commercial banks in Nepal. This chapter is composition of three sections firstly, the summary of the study; conclusion of the study; and lastly, some practical recommendations are suggested to help to solve the problems observed on the basis of finding.

The first chapter consists of framework of the study as well as profile of selected joint venture banks. Similarly, second chapter is good review of the issues related with abstracts of capital structure. The possible valid uses of ratios and mechanism, financial and statistical tools and techniques are briefly reviewed in chapter three- research methodology. Lastly, fourth chapter consists of analytical framework of data and finding that is considered as the important part revealing the performance of selected banks.

5.2 Conclusion

It is renowned fact, whether we like it or not the globalization of commercial banks is a reality. The growth and increasing integration of the world economy has been parallel by expansion of global banking activities. Nepal, though a developing country, couldn't deny the fact that commercial banks has luring potentiality, which is responded by extending loan and developing new, highly innovative financial techniques that laid the foundation for totally new approaches to the provision of banking services. On the basis of entire research study, some conclusion has been deducted. This study particularly deals with conclusion about "Analysis of capital structure in selected commercial banks in Nepal". The analysis is very significant in project appraisal of the stiff competition. Thus, this study is mainly an endeavor to

confer general account of commercial banks in terms of ratios related with capital structure on the basis of financial statement.

Due to the liberal licensing policy adopted by Nepal Rastra bank, there are growing numbers of development banks and finance companies. Besides, there are micro-credit development banks, co-operatives, NGOs and postal saving offices that undertake limited banking and near banking financial services. The growth is still going on as so many new banks are coming into existence after this study. Nepalese financial sector has grown significantly both in terms of assets base, business volume and market size. Nepal has a reasonably diversified financial sector, as evidenced by the number and variety of institutions that play an active role in this sector, relative to Nepal's small and underdeveloped economic base. There are 25 commercial banks now in Nepal, but this study has been undertaken only three commercial banks viz. Nabil, Investment and Bok bank to examine and evaluate the financial data. Besides, latest financial statements of five years from 2004 to 2008 have been conferred for the purpose of the study. This study has been mainly conducted on the basis of secondary data that are processed and analyzed.

All the commercial banks have used high percentage of total debt in raising the assets. The higher ratio constitutes that the outsider's claim in total assets of banks is higher than owner's claim. The financial risk of the Investment bank average degree of financial constitutes 1.81 times which indicates the higher degree of financial risk. Though the banks are highly leveraged, Investment seems to be more leveraged bank in comparison with selected banks. On an average, Investment bank constitute 13.12 times and Bok constitute 12.94 times. Likewise Nabil constitute 10.88 times of D/E ratio, which should be reduced quickly as possible.

The average ROE of commercial banks i.e. Nabil, Investment and Bok banks are 35.84%, 23.59% and 23.34% respectively. The ROE ratio has a great impact to show the relative performance and strength of the bank in attractive future

investment. Nabil's earning of 35.84% infers that the bank has been able to utilize the shareholder's equity in efficient way.

The ROE of Nabil shows they have satisfactory return of earnings that is most desirable objectives of a business. The ratio of ROE reflects the extent to which this objective has been accomplished. Likewise, Bok has 23.34% returns on shareholder's equity, which is low in comparison with other banks.

The ICR shows that all banks are able in paying interest. In comparison Nabil is operating efficiently in terms of ICR. Investment and Bok perform satisfactory in case of ICR. They have 1.87% and 1.91% of ICR respectively.

Earning per share of all banks is in increasing trend, but Nabil has high earnings per share compared to other banks. In this regard, public would be attracted to buy the shares. Hence, the banks are suggested to collect the funds through issuing shares.

The NI approach implies that proportion of higher leverage consequently increase the value of the firm. This approach is well acquainted with this study as the value of the banks has increased in accordance to the increasing portion of leverage. The Ko of five banks is positive even though the rate of return is in decreasing trend.

The private sector banks have been successful in increasing their deposit and credit portfolio remarkably over the study period. The figures also show that most of these banks have been cautious about loans and advances. The operating profits of all the private sector commercial banks have gone up, so has the provision for loan loss. In short, the banking sector in Nepal somehow doing well even though it has to face a number of hurdles during the past few years.

In general, these banks are performing well in their own criteria. Hence, these banks are listed under group 'A' in FY 2004/05 by NEPSE as per their performance and efficiency.

5.3 RECOMMENDATION

1. In conclusion derived from findings of the study, commercial banks have lack of theoretical and practical knowledge with regard to capital structure theories. Nepalese investors are not attracted by the theories.
2. The capital structure of all the selected banks is highly leveraged. The proportion of debt and equity capital should be decided keeping in mind the efforts of tax advantage and financial distress. The banks, when it is difficult to pay interest and principal, ultimately lead to liquidation or bankruptcy. For such, the banks should reduce the high use of debt capital.
3. Return ratios like; return on total assets, return on total deposits and return on shareholder's equity are not satisfactory in the selected banks. Nabil seems bit outperforming than other banks in case of ROE. Having geared up capital structure position and insufficient returns indicates the weak aspect of the banks. All the selected banks are suggested to use the resources into most profitable sector and be more concerned to get better return and be careful about their financial condition so that their returns would not be depressed anymore.
4. Additionally banks are required and recommended to expand assets and branches, which ultimately affect the banks capital structure and expected to increase the profitability more than the present. All the banks vary in case on total asset, numbers of staffs, and number of branches and their volume transactions.
5. The savings from rural communities are neglected by commercial banks, without which they can't contribute much to the economic development of the country. So, commercial banks recommended being cooperative and should expand branches by covering all the five developing regions of the country including rural areas could be captured by reaching them through expansion of

branches and by providing innovative and improved quality of services. The competition from the informal sectors and other financial institutions can then be handled. This will ultimately benefit the country as well as the banks themselves.

6. It is visible that commercial banks are granting significant role in the modern banking system to uplift the economical development of the nation but they are not playing merchant banking role. Hence, commercial banks are suggested to play the role of financial intermediary and merchant banking like underwriting of securities, brokers' development of capital market and supportive role to the security exchange center which consequently be helpful for the up liftment of nation.

7. Similarly, commercial banks are not concentrated to mobilize their deposit funds in productive areas. So, they are proposed to come forward to match government obligation by financing the priority sector development programs.

8. Nepalese shareholders are very much concerned about the payment of cash dividend by the joint venture banks rather than their financial statement. As such, banks are suggested to pay cash dividend consistently. Especially Investment and BOK banks are weak in paying cash dividend. Dividend payout ratio should be determined considering the shareholders expectation and the growth requirements of the banks. A higher payout attracts both the existing and potential investors leading to increase in market price of share, which consequently leads to the strengthened financing capability.

9. The banks should give continuity in providing both conceptual and practical training to the staff to enhance their knowledge, skill and competency level, they should remain consistently vigilant in enhancing their moral and motivation. The bank has to enhance effectiveness, efficiency and proper coordination of its department tasks by continuously of its department tasks by continuously reviewing its structural design in accordance with the need of the changing time and situation.

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Appendices

APPENDIX 1: Financial Leverage

$$\text{Financial Leverage} = \frac{\text{Long Term Debt}}{\text{Total Assets}}$$

Financial Leverage of NABIL

(Rs. In '000')

F/Y	Long Term Debt	Total Assets	FL (in %)
2003/04	14,348,693	16,745,486	86.69
2004/05	14,603,671	17,186,330	84.97
2005/06	19,520,601	22,329,971	87.42
2006/07	24,224,858	27,253,393	88.89
2007/08	33,455,047	37,132,759	90.01
Average			87.60

Financial Leverage of Investment

(Rs. In '000')

F/Y	Long Term Debt	Total Assets	FL (in %)
2003/04	11,886,179	13,255,496	89.67
2004/05	14,604,574	16,274,064	89.74
2005/06	19,477,306	21,330,138	91.31
2006/07	25,288,856	27,590,844	91.66
2007/08	36,801,726	38,873,306	94.67
Average			91.41

Financial Leverage of BOK

(Rs. In '000')

F/Y	Long Term Debt	Total Assets	FL (in %)
2003/04	8,653,794	9,496,343	91.12
2004/05	8,948,748	9,857,130	90.78
2005/06	11,238,539	12,278,329	91.53
2006/07	13,318,927	14,570,098	91.41
2007/08	16,133,737	17,721,925	91.04
Average			91.18

APPENDIX 2: Debt Equity Ratio

$$\text{Debt Equity Ratio} = \frac{\text{Total Debt}}{\text{Total Equity}}$$

Debt Equity Ratio of NABIL

(Rs. In '000')

F/Y	Total Debt	Total Equity	DER (in %)
2003/04	14,348,693	1,481,682	9.68
2004/05	14,603,671	1,657,638	8.81
2005/06	19,520,601	1,874,994	10.41
2006/07	24,224,858	2,057,049	11.78
2007/08	33,455,047	2,437,199	13.73
Average			10.88

Debt Equity Ratio of Investment

(Rs. In '000')

F/Y	Total Debt	Total Equity	DER (in %)
2003/04	11,886,179	729,048	16.30
2004/05	14,604,574	1,180,173	12.37
2005/06	19,477,306	1,415,440	13.76
2006/07	25,288,856	1,878,123	13.46
2007/08	36,801,726	2,686,785	13.70
Average			13.12

Debt Equity Ratio of BOK

(Rs. In '000')

F/Y	Total Debt	Total Equity	DER (in %)
2003/04	8,653,794	650,745	13.30
2004/05	8,948,748	720,738	12.42
2005/06	11,238,539	839,734	13.38
2006/07	13,318,927	981,978	13.56
2007/08	16,133,737	1,342,073	12.02
Average			12.94

APPENDIX 3: Interest Coverage Ratio

$$\text{Interest Coverage Ratio} = \frac{\text{Earning Before Interest And Tax}}{\text{Interest Expenses}}$$

Interest Coverage Ratio of NABIL

(Rs. In '000')

F/Y	EBIT	Interest	ICR (in %)
2003/04	1,050,706	282,948	3.71
2004/05	1,194,899	243,544	4.91
2005/06	1,359,513	357,161	3.81
2006/07	1,480,157	555,710	2.66
2007/08	1,670,427	758,436	2.20
Average			3.46

Interest Coverage Ratio of Investment

(Rs. In '000')

F/Y	EBIT	Interest	ICR (in %)
2003/04	565,770	326,202	1.73
2004/05	784,887	354,359	2.21
2005/06	959,387	490,947	1.95
2006/07	1,246,030	685,530	1.82
2007/08	1,649,625	992,158	1.66
Average			1.87

Interest Coverage Ratio of BOK

(Rs. In '000')

F/Y	EBIT	Interest	ICR (in %)
2003/04	424,519	286,297	1.48
2004/05	514,390	241,639	2.13
2005/06	576,665	308,156	1.87
2006/07	677,083	339,181	2.00
2007/08	823,963	417,543	2.07
Average			1.91

APPENDIX 4: Degree of Financial Leverage

$$\text{Degree of Financial Leverage} = \frac{\text{EBIT}}{\text{EBIT} - \text{Interest Expenses}}$$

Degree of Financial Leverage of NABIL

(Rs. In '000')

F/Y	EBIT	EBIT-Interest	DFL (in %)
2003/04	1,050,706	767,758	1.37
2004/05	1,194,899	951,355	1.26
2005/06	1,359,513	1,002,352	1.36
2006/07	1,480,157	924,447	1.60
2007/08	1,670,427	911,991	1.83
Average			1.48

Degree of Financial Leverage of Investment

(Rs. In '000')

F/Y	EBIT	EBIT-Interest	ICR (in %)
2003/04	565,770	239,568	2.36
2004/05	784,887	430,338	1.82
2005/06	959,387	468,440	2.05
2006/07	1,246,030	560,500	2.22
2007/08	1,649,625	657,467	2.51
Average			2.19

Degree of Financial Ratio of BOK

(Rs. In '000')

F/Y	EBIT	EBIT-Interest	DFL (in %)
2003/04	424,519	138,222	3.07
2004/05	514,390	272,751	1.89
2005/06	576,665	268,156	2.15
2006/07	677,083	337,902	2.00
2007/08	823,963	415,420	2.01
Average			2.22

APPENDIX 5: Return on Total Assets

$$\text{Return on Total Assets} = \frac{\text{Net Profit After Tax}}{\text{Total Assets}}$$

Return on Total Assets of NABIL

(Rs. In '000')

F/Y	Net Profit	Total Assets	ROA (in %)
2003/04	455,311	16,745,486	2.72
2004/05	518,637	17,186,330	3.02
2005/06	635,263	22,329,971	3.23
2006/07	673,959	27,253,393	2.47
2007/08	746,468	37,132,759	2.01
Average			2.69

Return on Total Assets of Investment

(Rs. In '000')

F/Y	Net Profit	Total Assets	ROA (in %)
2003/04	152,671	13,255,496	1.15
2004/05	232,147	16,274,064	1.53
2005/06	350,536	21,330,138	1.61
2006/07	501,399	27,590,844	1.82
2007/08	696732	38,873,306	1.79
Average			1.58

Return on Total Assets of BOK

(Rs. In '000')

F/Y	Net Profit	Total Assets	ROA (in %)
2003/04	205,161	9,496,343	1.34
2004/05	226,993	9,857,130	1.42
2005/06	331,329	12,278,329	1.65
2006/07	421,753	14,570,098	1.80
2007/08	361,497	17,721,925	2.04
Average			1.65

APPENDIX 6: Return on Deposits Ratio

$$\text{Return on Deposits} = \frac{\text{Net Profit After Tax}}{\text{Total Deposits}}$$

Return on Deposits of NABIL

(Rs. In '000')

F/Y	Net Profit	Total Deposits	ROD (in %)
2003/04	455,311	14,119,033	3.022
2004/05	518,637	14,586,609	3.56
2005/06	635,263	19,347,399	3.28
2006/07	673,959	23,342,285	2.89
2007/08	746,468	31,915,047	2.33

Average	3.06
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Return on Deposits of Investment

(Rs. In '000')

F/Y	Net Profit	Total Deposits	ROD (in %)
2003/04	152,671	11,524,679	1.32
2004/05	232,147	14,254,574	1.63
2005/06	350,536	18,927,306	1.85
2006/07	501,399	24,488,856	2.05
2007/08	696,732	34,451,726	2.02
Average			1.77

Return on Deposits of BOK

(Rs. In '000')

F/Y	Net Profit	Total Deposits	ROA (in %)
2003/04	205,161	7,741,644	1.65
2004/05	226,993	8,942,748	1.56
2005/06	331,329	10,485,359	1.93
2006/07	421,753	12,388,927	2.12
2007/08	361,497	15,833,737	2.28
Average			1.91

APPENDIX 7: Return on Shareholder's Equity

$$\text{Return on Shareholder's Equity} = \frac{\text{Net Profit after tax}}{\text{Shareholder's Equity}}$$

Return on Shareholder's Equity of NABIL

(Rs. In '000')

F/Y	Net Profit	Equity	ROE (in %)
2003/04	455,311	1,481,682	30.73
2004/05	518,637	1,657,638	31.29
2005/06	635,263	1,874,994	33.88
2006/07	673,959	2,057,049	32.76
2007/08	746,468	2,437,199	30.63
Average			35.84

Return on Shareholder's Equity of Investment

(Rs. In '000')

F/Y	Net Profit	Total Equity	ROE (in %)
2003/04	152,671	729,048	20.93
2004/05	232,147	1,180,173	19.67
2005/06	350,536	1,415,440	24.77
2006/07	501,399	1,878,123	26.68
2007/08	696,732	2,686,785	25.93
Average			23.59

Return on Shareholder's Equity of BOK

(Rs. In '000')

F/Y	Net Profit	Total Equity	ROE (in %)
2003/04	205,161	650,745	19.59
2004/05	226,993	720,738	19.36
2005/06	331,329	839,734	24.11
2006/07	421,753	981,978	26.72
2007/08	361,497	1,342,073	26.94
Average			23.34

APPENDIX 8: Earning Per Share

$$\text{Earning Per Share} = \frac{\text{Net Income}}{\text{No. of Shares Outstanding}}$$

Earning Per Share of NABIL

(Rs. In '000')

F/Y	Net Income	No. of Shares(N)	EPS (in Rs.)
2003/04	455,311	491,654	92.61
2004/05	518,637	491,654	105.49
2005/06	635,263	491,654	129.21
2006/07	673,959	491,654	137.08
2007/08	746,468	689,213	108.31
Average			114.54

Earnings Per Share of Investment

(Rs. In '000')

F/Y	Net Income	No. of Shares(N)	EPS (in Rs)
2003/04	152,671	295,293	51.70
2004/05	232,147	587,738	39.50
2005/06	350,536	590,586	59.35
2006/07	501,399	801,352	62.57
2007/08	696,732	1,203,915	57.87
Average			54.20

Earnings Per Share of BOK

(Rs. In '000')

F/Y	Net Income	No. of Shares(N)	EPS (in Rs)
2003/04	205,161	463,581	27.50
2004/05	226,993	463,581	30.10
2005/06	331,329	463,581	43.67
2006/07	421,753	603,141	43.50
2007/08	361,497	603,141	59.94
Average			40.94

APPENDIX 9: Dividend Per Share

$$\text{Dividend Per Share} = \frac{\text{Total Dividend}}{\text{No. of Shares Outstanding}}$$

Dividend Per Share of NABIL

(Rs. In '000')

F/Y	Total Dividend	No. of Shares(N)	DPS (in Rs.)
2003/04	536,450	491,654	65
2004/05	361,221	491,654	70
2005/06	435,084	491,654	85
2006/07	509,418	491,654	100
2007/08	437,373	689,216	60
Average			76

Dividend per Share of Investment

(Rs. In '000')

F/Y	Total dividend	No. of Shares(N)	DPS (in Rs)
2003/04	44,294	295,293	15
2004/05	79,353	587,738	12.50
2005/06	121,627	590,586	20
2006/07	43,650	801,352	5
2007/08	93,468	1,203,915	7.5
Average			12

Dividend per Share of BOK

(Rs. In '000')

F/Y	Total Dividend	No. of Shares(N)	EPS (in Rs)
2003/04	46,358	463,581	10
2004/05	81,477	463,581	15
2005/06	98,712	463,581	18
2006/07	135,575	603,141	20
2007/08	32,804	603,141	12.11
Average			15.02

APPENDIX 10: Dividend Payout Ratio

$$\text{Dividend Payout Ratio} = \frac{\text{Dividend Per Share}}{\text{Earning Per Share}}$$

Dividend Payout Ratio of NABIL

(Rs. In '000')

F/Y	DPS	EPS	DPR (in %)
2003/04	65	91.61	70.18
2004/05	70	105.49	66.36
2005/06	85	129.21	65.78
2006/07	100	137.08	72.95
2007/08	60	108.31	55.40
Average			66.13

Dividend Payout Ratio of Investment

(Rs. In '000')

F/Y	DPS	EPS	DPR (in %)
2003/04	15	51.70	29.01
2004/05	12.5	39.50	31.65
2005/06	20	59.35	33.70
2006/07	5	62.57	8
2007/08	7.5	57.87	12.96
Average			23.06

Dividend Payout Ratio of BOK

(Rs. In '000')

F/Y	DPS	EPS	DPR (in %)
2003/04	10	27.50	36.36
2004/05	15	30.10	49.83
2005/06	18	43.67	41.22
2006/07	20	43.50	45.98
2007/08	12.11	59.94	20.20
Average			38.72

APPENDIX 10: Calculation of NI Approach

Market Value of Equity(S)

$$= \text{No. Of Shares Outstanding} \times \text{Closing MPS}$$

Market Value of Firm(V)

$$= \text{Market Value of Debt} + \text{Market Value of Equity(S)}$$

Value of Firm of Nabil

F/Y	No. of Share	MPS	Market Value of Share(S)	Market Value of Debt	V=S+B
2003/04	491,654	1,000	491,654,000	14,348,693	506,002,693
2004/05	491,654	1,505	739,939,270	14,603,671	754,542,941
2005/06	491,654	2,240	1,101,304,960	19,520,601	1,120,825,561
2006/07	491,654	5,050	2,482,852,700	24,224,858	2,507,077,558
2007/08	689,216	5,275	3,635,614,400	33,455,047	3,669,069,447

Value of Firm of Investment

F/Y	No. of Share	MPS	Market Value of Share(S)	Market Value of Debt	V=S+B
2003/04	295,293	940	277,575,420	11,886,179	289,461,599
2004/05	587,738	800	470,190,400	14,604,574	484,794,974
2005/06	590,586	1,260	744,138,360	19,477,306	763,615,666
2006/07	801,352	1,729	1,385,537,608	25,288,856	1,410,826,464
2007/08	1,203,915	2,450	2,949,591,750	36,801,726	2,986,393,476

Value of Firm of BOK

F/Y	No. of Share	MPS	Market Value of Share(S)	Market Value of Debt	V=S+B
2003/04	463,581	295	136,756,395	8,653,794	145,410,189
2004/05	463,581	430	199,339,830	8,948,748	208,288,578
2005/06	463,581	850	394,043,850	11,238,539	405,282,389
2006/07	603,141	1,375	829,318,875	13,318,927	842,637,802
2007/08	603,141	2,350	1,417,381,350	16,133,737	1,433,515,087

APPENDIX 10: Overall Capitalization rate (Ko)

$$\text{Cost of Overall Capitalization (Ko)} = \frac{\text{Net Operating Income (EBIT)}}{\text{Total Market Value of Firm (V)}}$$

Calculation of Overall Capitalization rate (Ko) of Nabil

F/Y	EBIT	Value of firm(V)	Ko
2003/04	1,050,706	506,002,693	20.76
2004/05	1,194,899	754,542,941	15.84
2005/06	1,359,513	1,120,825,561	12.13
2006/07	1,480,157	2,507,077,558	5.90
2007/08	1,670,427	3,669,069,447	4.55
Average			11.84

Calculation of Overall Capitalization rate (Ko) of Investment

F/Y	EBIT	Value of firm(V)	Ko
2003/04	565,770	289,461,599	19.55
2004/05	784,887	484,794,974	16.19
2005/06	959,387	763,615,666	12.64
2006/07	1,246,030	1,410,826,464	8.83
2007/08	1,649,625	2,986,393,476	5.52
Average			12.55

Calculation of Overall Capitalization rate (Ko) of BOK

F/Y	EBIT	Value of firm(V)	Ko
2003/04	424,519	145,410,189	29.19
2004/05	514,390	208,288,578	24.69
2005/06	576,665	405,282,389	14.23
2006/07	677,083	842,637,802	8.04
2007/08	823,963	1,433,515,087	5.75
Average			16.38

APPENDIX 10: Calculataion of NOI Approach

$$\text{Cost of Eqiuty (Ke)} = \frac{\text{Equity to Common Shareholder(NI)}}{\text{Market Value of Stock(S)}}$$

Calculation of Equity Capitalization rate (Ke) of Nabil

F/Y	EBT	Value of Equity(S)	Ke
2003/04	767,758	491,654,000	15.61
2004/05	951,355	739,939,270	12.86
2005/06	1,002,352	1,101,304,960	9.10
2006/07	924,447	2,482,852,700	4.37
2007/08	911,991	3,635,614,400	2.51
Average			8.89

Calculation of Equity Capitalization rate (Ke) of Investment

F/Y	EBT	Value of Equity(S)	Ke
2003/04	239,568	277,575,420	8.63
2004/05	430,338	470,190,400	9.15
2005/06	468,440	744,138,360	6.30
2006/07	560,500	1,385,537,608	4.04
2007/08	657,467	2,949,591,750	2.22
Average			6.07

Calculation of Equity Capitalization rate (Ke) of BOK

F/Y	EBT	Value of firm(V)	Ke
2003/04	138,222	136,756,395	10.10
2004/05	272,751	199,339,830	13.68
2005/06	268,156	394,043,850	6.80
2006/07	337,902	829,318,875	4.07
2007/08	415,420	1,417,381,350	2.93
Average			7.52

APPENDIX 11: Correlation coefficient Between EBIT and Interest Payment with Probable Error

$$r = \frac{N\Sigma XY - \Sigma X \Sigma Y}{\sqrt{N\Sigma X^2 - (\Sigma X)^2} \times \sqrt{N\Sigma Y^2 - (\Sigma Y)^2}}$$

Where,

N= No. of Observations

X= Variable Indicating EBIT

Y= Variable Indicating Interest Payment

$$P.E. = \frac{0.6745 \times (1 - r^2)}{\sqrt{N}}$$

Where,

r = Correlation Coefficient

N= No. of pairs of observations.

Calculation of correlation Coefficient between EBIT and Interest of Nabil

F/Y	EBIT(X)	Interest(Y)	XY	X ²	Y ²
2003/04	1,050.71	282.95	297,298.39	1,103,991.50	80,060.70
2004/05	1,194.90	243.54	291,005.95	1,427,786.01	59,311.73
2006/07	1,359.51	357.16	485,562.59	1,848,267.44	127,563.27
2007/08	1,480.16	555.71	822,539.71	2,190,873.63	308,813.60
2008/09	1,670.43	758.44	1,266,920.93	2,790,336.38	575,231.23
Total	6,755.71	2,197.80	3,163,327.57	9,361,254.96	1,150,980.53

$$r = \frac{N \sum XY - \sum X \sum Y}{\sqrt{N \sum X^2 - (\sum X)^2} \times \sqrt{N \sum Y^2 - (\sum Y)^2}}$$

$$= \frac{5 \times 3,163,327.57 - 6,755.71 \times 2,197.80}{\sqrt{5 \times 9,361,254.96 - (6,755.71)^2} \times \sqrt{5 \times 1,150,980.53 - (2,197.80)^2}}$$

$$= 0.093$$

$$P.E. = \frac{0.6745 \times (1 - r^2)}{\sqrt{N}}$$

$$P.E. = \frac{0.6745 \times (1 - 0.008649)}{\sqrt{5}}$$

$$= 1.79$$

Calculation of correlation Coefficient between EBIT and Interest of Investment

F/Y	EBIT(X)	Interest(Y)	XY	X ²	Y ²
2003/04	565.77	326.2	184,554.17	320,095.69	106,406.44
2004/05	784.89	354.36	278,133.62	616,052.31	125,571.01
2006/07	959.39	490.95	471,012.52	920,429.17	241,031.90
2007/08	1246.03	685.53	854,190.95	1,552,590.76	469,951.38
2008/09	1649.63	992.16	1,636,696.90	2,721,279.14	984,381.47
Total	5,205.71	2,849.20	3,424,588.16	6,130,447.07	1,927,342.20

$$r = \frac{N\sum XY - \sum X \sum Y}{\sqrt{N\sum X^2 - (\sum X)^2} \times \sqrt{N\sum Y^2 - (\sum Y)^2}}$$

$$= \frac{5 \times 3,424,588.16 - 5,205.71 \times 2,849.20}{\sqrt{5 \times 6,130,447.07 - (5,205.71)^2} \times \sqrt{5 \times 1,927,342.20 - (2,849.20)^2}}$$

$$= 0.099$$

$$P.E. = \frac{0.6745 \times (1 - r^2)}{\sqrt{N}}$$

$$= 1.79$$

Calculation of correlation Coefficient between EBIT and Interest of BOK

F/Y	EBIT(X)	Interest(Y)	XY	X ²	Y ²
2003/04	424.52	286.30	121,540.08	180,217.23	81,967.69
2004/05	514.39	241.64	124,297.20	264,597.07	58,389.89
2006/07	576.67	308.16	177,706.63	332,548.29	94,962.59
2007/08	677.08	339.18	229,651.99	458,437.33	115,043.07
2008/09	823.96	417.54	344,036.26	678,910.08	174,339.65
Total	3,016.62	1,592.82	997,232.16	1,914,710.00	524,702.89

$$r = \frac{N\Sigma XY - \Sigma X\Sigma Y}{\sqrt{N\Sigma X^2 - (\Sigma X)^2} \times \sqrt{N\Sigma Y^2 - (\Sigma Y)^2}}$$

$$= \frac{5 \times 997,232.16 - 3,016.62 \times 1,592.82}{\sqrt{5 \times 1,914,710.00 - (3,016.62)^2} \times \sqrt{5 \times 524,702.89 - (1,592.82)^2}}$$

$$= 0.89$$

$$P.E. = \frac{0.6745 \times (1 - r^2)}{\sqrt{N}}$$

$$= 0.38$$

APPENDIX 12: Correlation coefficient Between Total Debt and Shareholder's Equity with Probable Error

$$r = \frac{N\Sigma XY - \Sigma X\Sigma Y}{\sqrt{N\Sigma X^2 - (\Sigma X)^2} \times \sqrt{N\Sigma Y^2 - (\Sigma Y)^2}}$$

Where,

N= No. of Observations

X= Variable Indicating Total Debt

Y= Variable Indicating Shareholder's Equity

$$P.E. = \frac{0.6745 \times (1 - r^2)}{\sqrt{N}}$$

Where,

r = Correlation Coefficient

N= No. of pairs of observations.

Calculation of correlation Coefficient between Total Debt and Shareholder's Equity of Nabil

F/Y	Debt(X)	Equity(Y)	XY	X²	Y²
2003/04	1434.87	148.17	212,604.69	2,058,851.92	21,954.35
2004/05	1460.37	165.76	242,070.93	2,132,680.54	27,476.38
2006/07	1952.06	187.50	366,011.25	3,810,538.24	35,156.25
2007/08	2422.49	205.70	498,306.19	5,868,457.80	42,312.49
2008/09	3345.50	243.72	815,365.26	11,192,370.25	59,399.44
Total	10,615.29	950.85	2,134,358.32	25,062,898.75	186,298.90

$$r = \frac{N\sum XY - \sum X \sum Y}{\sqrt{N\sum X^2 - (\sum X)^2} \times \sqrt{N\sum Y^2 - (\sum Y)^2}}$$

$$= \frac{5 \times 2,134,358.32 - 10,615.29 \times 950.85}{\sqrt{5 \times 25,062,898.75 - (10,615.29)^2} \times \sqrt{5 \times 186,298.90 - (950.85)^2}}$$

=0.98

$$P.E. = \frac{0.6745 \times (1 - r^2)}{\sqrt{N}}$$

=0.07

Calculation of correlation Coefficient between Total Debt and Shareholder's Equity of Investment

F/Y	Debt (X)	Equity (Y)	XY	X²	Y²
2003/04	1188.62	72.9	86,650.40	1,412,817.50	5,314.41
2004/05	1460.46	118.02	172,363.49	2,132,943.41	13,928.72
2006/07	1947.73	141.54	275,681.70	3,793,652.15	20,033.57
2007/08	2528.89	187.81	474,950.83	6,395,284.63	35,272.60
2008/09	3680.17	268.68	988,788.08	13,543,651.23	72,188.94
Total	10,805.87	788.95	1,998,434.50	27,278,348.93	146,738.24

$$r = \frac{N\Sigma XY - \Sigma X \Sigma Y}{\sqrt{N\Sigma X^2 - (\Sigma X)^2} \times \sqrt{N\Sigma Y^2 - (\Sigma Y)^2}}$$

$$\frac{5 \times 1,998,434.50 - 10,805.87 \times 788.95}{\sqrt{5 \times 27,278,348.93 - (10,805.87)^2} \times \sqrt{5 \times 146,738.24 - (788.95)^2}}$$

$$= 0.99$$

$$P.E. = \frac{0.6745 \times (1 - r^2)}{\sqrt{N}}$$

$$= 0.04$$

Calculation of correlation Coefficient between Total Debt and Shareholder's Equity of BOK

F/Y	Debt (X)	Equity (Y)	XY	X ²	Y ²
2003/04	865.38	65.07	56,310.28	748,882.54	4,234.10
2004/05	894.87	72.07	64,493.28	800,792.32	5,194.08
2006/07	1123.85	83.97	94,369.68	1,263,038.82	7,050.96
2007/08	1331.89	98.2	130,791.60	1,773,930.97	9,643.24
2008/09	1613.37	134.21	216,530.39	2,602,962.76	18,012.32
Total	5,829.36	453.52	562,495.23	7,189,607.41	44,134.71

$$r = \frac{N\Sigma XY - \Sigma X \Sigma Y}{\sqrt{N\Sigma X^2 - (\Sigma X)^2} \times \sqrt{N\Sigma Y^2 - (\Sigma Y)^2}}$$

$$\frac{5 \times 562,495.23 - 5,829.36 \times 453.52}{\sqrt{5 \times 7,189,607.41 - (5,829.36)^2} \times \sqrt{5 \times 44,134.71 - (453.52)^2}}$$

$$= 0.48$$

$$P.E. = \frac{0.6745 \times (1 - r^2)}{\sqrt{N}}$$

$$= 1.39$$

APPENDIX 13: Correlation coefficient Between Overall Capitalization Rate (Ko) and Debt- Equity Ratio with Probable Error

$$r = \frac{N\sum XY - \sum X \sum Y}{\sqrt{N\sum X^2 - (\sum X)^2} \times \sqrt{N\sum Y^2 - (\sum Y)^2}}$$

Where,

N= No. of Observations

X= Variable Indicating Ko

Y= Variable Indicating Debt- Equity Ratio

$$P.E. = \frac{0.6745 \times (1 - r^2)}{\sqrt{N}}$$

Where,

r = Correlation Coefficient

N= No. of pairs of observations.

Calculation of correlation Coefficient between Overall Capitalization Rate (Ko) and Debt- Equity Ratio of Nabil

F/Y	Ko(X)	DER(Y)	XY	X²	Y²
2003/04	20.76	9.68	200.96	430.98	93.70
2004/05	15.84	8.81	139.55	250.91	77.62
2006/07	12.13	10.41	126.27	147.14	108.37
2007/08	5.9	11.78	69.50	34.81	138.77
2008/09	4.55	13.73	62.47	20.70	188.51
Total	59.18	54.41	598.75	884.53	606.97

$$r = \frac{N\Sigma XY - \Sigma X \Sigma Y}{\sqrt{N\Sigma X^2 - (\Sigma X)^2} \times \sqrt{N\Sigma Y^2 - (\Sigma Y)^2}}$$

$$\frac{5 \times 598.75 - 59.18 \times 54.41}{\sqrt{5 \times 884.53 - (59.18)^2} \times \sqrt{5 \times 606.97 - (54.41)^2}}$$

$$= -0.86$$

$$P.E. = \frac{0.6745 \times (1 - r^2)}{\sqrt{N}}$$

$$= 0.47$$

Calculation of correlation Coefficient between Overall Capitalization Rate (Ko) and Debt- Equity Ratio of Investment

F/Y	Ko (X)	DER (Y)	XY	X ²	Y ²
2003/04	19.55	16.3	318.67	382.20	265.69
2004/05	16.19	12.37	200.27	262.12	153.02
2006/07	12.64	13.76	173.93	159.77	189.34
2007/08	8.83	13.46	118.85	77.97	181.17
2008/09	5.52	13.7	75.62	30.47	187.69
Total	62.73	69.59	887.34	912.53	976.91

$$r = \frac{N\Sigma XY - \Sigma X \Sigma Y}{\sqrt{N\Sigma X^2 - (\Sigma X)^2} \times \sqrt{N\Sigma Y^2 - (\Sigma Y)^2}}$$

$$\frac{5 \times 887.34 - 62.73 \times 69.59}{\sqrt{5 \times 912.53 - (62.73)^2} \times \sqrt{5 \times 976.91 - (69.59)^2}}$$

$$= 0.44$$

$$P.E. = \frac{0.6745 \times (1 - r^2)}{\sqrt{N}}$$

$$= 1.46$$

Calculation of correlation Coefficient between Overall Capitalization Rate (Ko) and Debt- Equity Ratio of BOK

F/Y	Ko (X)	DER (Y)	XY	X²	Y²
2003/04	29.19	13.3	388.23	852.06	176.89
2004/05	24.69	12.42	306.65	609.60	154.26
2006/07	14.23	13.38	190.40	202.49	179.02
2007/08	8.04	13.56	109.02	64.64	183.87
2008/09	5.75	12.02	69.12	33.06	144.48
Total	81.90	64.68	1,063.41	1,761.85	838.52

$$r = \frac{N\sum XY - \sum X \sum Y}{\sqrt{N\sum X^2 - (\sum X)^2} \times \sqrt{N\sum Y^2 - (\sum Y)^2}}$$

$$= \frac{5 \times 1,063.41 - 81.90 \times 64.68}{\sqrt{5 \times 1,761.85 - (81.90)^2} \times \sqrt{5 \times 838.52 - (64.68)^2}}$$

$$= 0.143$$

$$P.E. = \frac{0.6745 \times (1 - r^2)}{\sqrt{N}}$$

$$= 1.77$$

APPENDIX 14: Nabil Bank

NABIL Bank Comparative Balance Sheet

Capital and liabilities	FY2003/04	FY2004/05	FY2005/06	FY2006/07	FY2007/08
Capital	491,654	491,654	491,654	491,654	689216
Reserve and Surplus	990,028	1,165,984	1,383,340	1,565,395	1747983
Debenture & Bond	0	0	0	0	24,000,000
Borrowing	229,660	17,062	173,202	882,573	1,360,000
Deposit	14,119,033	14,596,609	19,347,399	23,342,285	31915047
Bills Payable	173,499	119,753	112,607	83,515	238422
Proposed & Payable Dividend	536,450	361,221	435,084	509,418	437373
Tax Liabilities	0	15,345	34605	0	38777
Other Liabilities	205,162	428,702	352,080	378,553	465941
Total Liabilities	16,745,486	17,186,330	22,329,971	27,253,393	37132759
Cash Balance	286,886	146,353	237,819	270,407	511527
Balance With NRB	606,695	389,705	318,359	1,113,415	1829470
Bank Balance With Banks	76,905	23,323	74,061	16,003	330244
Money At Call	918,733	868,428	1,734,902	563,533	1952361
Investment	5,835,948	4,267,233	6,178,533	8,945,311	9939771
Loan and Advances	8,189,993	10,586,170	12,922,543	15,545,779	21365053
Fixed Assets	338,126	361,235	319,086	286,895	598039
Non- Banking Assets	0	0	0	0	0
Other assets	492,200	543,883	544,668	512,050	606394
Total Assets	16,745,486	17,186,330	22,329,971	27,253,393	37132759

Comparative Profit & Loss Statement

Particular	FY2003/ 04	FY2004/ 05	FY2005/ 06	FY2006/ 07	FY2007/ 08
Interest Income	1,001,617	1,068,747	1,309,999	1,587,759	1978697
Interest Expenses	282,948	243,544	357,161	555,710	758436
Net Interest Income	718,669	825,203	952,838	1,032,049	1220261
Commission and discount	135,958	128,883	138,294	150,608	156235
Other Operating Income	38,755	55,934	82,898	87,574	97445
Exchange Income	157,324	184,879	185,484	209,926	196487
Total Operating Income	1,050,706	1,194,899	1,359,513	1,480,157	1670427
Employees Expenses	180,840	199,516	219,781	240,161	202908
Other Operating Expenses	150,759	190,299	182,596	188,183	220751
Exchange Loss	0	0	0	0	0
Operating Profit Before	719,107	805,084	957,036	1,051,813	1186769
Provisions for Possible Losses	1,052	243,357	3,770	14,206	64055
Operating Profit	718,055	561,727	953,266	1,037,607	1122714
Non-Operating Income/ Expenses	92,781	72,241	735	5,281	24084
Return From Loan Loss Provision	0	0	7,729	10,926	11101
Profit From Ordinary activities	810,836	633,968	961,730	1,053,814	1157898
Extra ordinary Income/Expenses	(81,821)	(31,133)	26,074	40,736	39991
Net Profit indulging all activities	729,015	602,835	987,804	1,094,550	1197889
Provision For Staff Bonus	71,941	84,198	89,800	99,504	108899
Provision For Income Tax	201,763	0	262,741	321,087	342522
-This Year	0	0	262,563	314,527	342568
-Up to Last Year	0	0	179	6,560	53
Net Profit/ Loss	455,311	518,637	635,263	673,959	746468

APPENDIX 15: Investment Bank

Investment Bank Comparative Balance Sheet

Capital and liabilities	FY2003/04	FY2004/05	FY2005/06	FY2006/07	FY2007/08
Capital	295,293	587,738	590,586	801,352	1,203,915
Reserve and Surplus	433,755	592,435	824,854	1,076,771	1482870
Debenture & Bond	0	0	550,000	800,000	105,000
Borrowing	361,500	350,000	0	0	0
Deposit	11,524,679	14,254,574	18,927,306	24,488,856	34,451,726
Bills Payable	57,836	15,008	18,820	32,401	78,839
Proposed & Payable Dividend	44,294	79,353	121,627	43,650	93,468
Tax Liabilities	0	0	9,319	295	24,083
Other Liabilities	538,139	394,956	287,626	347,519	488,404
Total Liabilities	13,255,496	16,274,064	21,330,138	27,590,844	38,873,306
Cash Balance	315,383	374,266	562,560	763,984	1,464,483
Balance With NRB	545,620	780,244	1,526,067	1,381,352	1,820,006
Bank Balance With Banks	365,920	185,971	247,894	296,178	470,453
Money At Call	310,000	140,000	70,000	362,970	0
Investment	3,862,483	3,934,189	5,602,869	6,505,680	6,874,024
Loan and Advances	7,130,125	10,126,056	12,776,208	17,286,427	26,996,652
Fixed Assets	338,126	361,235	319,086	286,895	970,092
Non- Banking Assets	24,650	1,537	0	1,125	750
Other assets	451,527	411,209	201,090	233,672	276,847
Total Assets	13,255,496	16,274,064	21,330,138	27,590,844	38,873,306

Comparative Profit & Loss Statement

Particular	FY2003/ 04	FY2004/0 5	FY2005/ 06	FY2006/ 07	FY2007/ 08
Interest Income	731,403	886,800	1,172,742	1,584,987	2,194,276
Interest Expenses	326,202	354,549	490,947	685,530	992,158
Net Interest Income	405,201	532,251	681,795	899,457	1,202,117
Commission and discount	55,747	93,551	115,942	162,889	215,292
Other Operating Income	16,842	56,567	35,902	47,319	66,377
Exchange Income	87,980	102,518	125,448	135,355	165,839
Total Operating Income	565,770	784,887	959,387	1,246,030	1,649,625
Employees Expenses	89,749	97,004	111,054	145,371	187,150
Other Operating Expenses	149,479	182,915	200,215	243,430	313154
Exchange Loss	0	0	0	0	0
Operating Profit Before	726,542	504,968	648,118	857,229	1149321
Provisions for Possible Losses	91,092	140,409	103,808	129,719	135989
Operating Profit	235,450	364,559	544,310	727,510	1013332
Non-Operating Income/ Expenses	1,768	6,192	391	1,426	7048
Return From Loan Loss Provision	19,974	0	10,704	66,777	101577
Profit From Ordinary activities	257,192	370,751	555,405	795,713	1121956
Extra ordinary Income/Expenses	0	0	0	0	0
Net Profit indulging all activities	257,192	370,751	555,405	795,713	1121956
Provision For Staff Bonus	25,719	37,075	50,491	72,337	101996
Provision For Income Tax	78,802	101,529	154,378	221,977	323229
-This Year	0	0	154,378	221,977	323229
-Up to Last Year	0	0	0	0	0
Net Profit/ Loss	152,671	232,147	350,536	501,399	696732

APPENDIX 17: Bok Bank

BOK Bank Comparative Balance Sheet

Capital and liabilities	FY2003/04	FY2004/05	FY2005/06	FY2006/07	FY2007/08
Capital	463,581	463,581	463,581	603,141	603,141
Reserve and Surplus	187,164	257,157	376,153	378,837	738,932
Debenture & Bond	0	0	200,000	200,000	200,000
Borrowing	912,150	6,000	553,180	730,000	100,000
Deposit	7,741,644	8,942,748	10,485,359	12,388,927	15,833,738
Bills Payable	38,709	19,874	11,622	25,777	51,576
Proposed & Payable Dividend	46,358	81,477	98,712	135,575	32,804
Tax Liabilities	0	0	0	0	0
Other Liabilities	106,737	86,293	89,722	107,841	161,733
Total Liabilities	9,496,343	9,857,130	12,278,329	14,570,098	17,721,925
Cash Balance	139,220	161,470	184,020	219,043	536,747
Balance With NRB	449,864	417,867	349,296	883,496	606,049
Bank Balance With Banks	193,798	161,184	195,382	213,365	297,671
Money At Call	272,321	328,874	594,047	259,278	72,679
Investment	2,477,409	2,598,253	3,374,712	2,992,434	3,204,068
Loan and Advances	5,646,698	5,912,579	7,259,083	9,399,328	12,462,638
Fixed Assets	83,625	95,231	110,745	320,846	387,274
Non- Banking Assets	25,483	24,088	7,356	3,626	453
Other assets	207,925	157,584	203,688	278,682	154,346
Total Assets	9,496,343	9,857,130	12,278,329	14,570,098	17,721,925

Comparative Profit & Loss Statement

Particular	FY2003/ 04	FY2004/ 05	FY2005/ 06	FY2006/ 07	FY2007/ 08
Interest Income	567,096	607,096	718,121	819,004	1,034,158
Interest Expenses	286,297	241,639	308,156	339,181	417,543
Net Interest Income	280,799	365,457	409,966	479,823	616,614
Commission and discount	77,708	70,324	70,776	97,431	129,416
Other Operating Income	1,966	6,495	16,998	19,003	23,168
Exchange Income	64,064	72,115	78,955	80,826	93,765
Total Operating Income	424,519	514,390	576,665	677,083	862,963
Employees Expenses	47,726	53,822	59,120	69,740	90,602
Other Operating Expenses	85,829	99,190	117,591	138,430	170,481
Exchange Loss	0	0	0	0	0
Operating Profit Before	290,964	361,378	399,954	468,913	601,880
Provisions for Possible Losses	101,263	133,917	78,381	81,895	38,438
Operating Profit	189,701	227,462	321,573	387,018	563,441
Non-Operating Income/ Expenses	15,460	(469)	1,090	(2,780)	811
Return From Loan Loss Provision	0	209,129	106,871	37,104	61,833
Profit From Ordinary activities	205,161	436,122	426,535	421,342	626,085
Extra ordinary Income/Expenses	0	(209,129)	(95,205)	411	(45,396)
Net Profit indulging all activities	205,161	226,993	331,329	421,753	580,689
Provision For Staff Bonus	20,516	22,700	30,121	38,341	52,790
Provision For Income Tax	57,172	64,763	98,768	121,025	166,402
-This Year	0	64,763	93,236	115,425	162,535
-Up to Last Year	0	0	5,532	5,600	3,867
Net Profit/ Loss	127,473	139,530	202,441	662,387	361,497